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CENSUS OF INDIA 1921.

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VOLUME VII.
1921

BIHAR AND ORISSA.

PART I.

REPORT.

BY

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PATNA:

SUPERINTENDENT, GOVERNMENT PRINTING, BIHAR AND ORISSA.
1923.

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INTRODUCTION.

THE census of the population of Bihar and Orissa to which this report relates was taken on the night of March 18th, 1921, and was the sixth of the series. It extended to an area of 111,809 square miles and a population of 37,961,858 persons. The procedure followed was the same as on previous occasions and only a very brief explanation of it is required.

2. The first stage towards the taking of the census is the preparation of a complete list of villages throughout the province with the number of houses in each and the names of persons qualified to be appointed as members of the census staff. With one or two unimportant exceptions the whole of the province has now been surveyed and settled and its surface divided up into *mauzas* or villages as defined in the Tenancy Acts, the boundaries of which remain unaltered. These *mauzas* are the basis of the census organization. For census purposes the province is divided into charges under superintendents, circles under supervisors and blocks under enumerators. The block is the smallest unit and contains from 30 to 50 houses, this being the maximum number which experience has shown that a single man can enumerate correctly in the five hours from 7 p. m. to midnight during which the final census is taken. Each *mauza* is a block or consists of a number of blocks: but no block contains more than one *mauza*. From 10 to 15 blocks are ordinarily included in a circle and the charge, which is ordinarily coterminous with the jurisdiction of a police station, consists of a number of circles. The enumerators and supervisors are almost entirely non-officials, and the charge superintendents are usually sub-inspectors of police. At this census there were 210,914 enumerators, 16,180 supervisors and 942 charge superintendents: excluding therefore the sub-divisional officers, the district census officers and the provincial superintendent, the provincial census staff amounted to 228,036 persons all of whom, be it recorded to their honour, worked not only without remuneration but in many cases at personal expense.

3. The division of the province into blocks, circles and charges and the appointment of this staff was due to be finished by the middle of September 1920 and the staff had then to be trained in its duties. The first of these is house numbering when every house likely to be occupied on the census night is marked with a number and entered in a list, which is important as forming the basis on which the estimate of the number of forms required is prepared. From that point the staff are trained in the correct manner of filling up the census schedules: there are sixteen columns in the form and to fill them up correctly is by no means an easy task. On the morning after the census I sat at the telephone in Patna collecting information from a number of Government officers well acquainted with the preparation and use of forms who had made mistakes in filling up their schedules: *a fortiori* would the instructions be puzzling to persons less acquainted with the intricacies of bureaucratic thought. This training extended over several weeks and in the middle of February the preparation of the preliminary record began. The forms had by then been distributed and entries were made in them for every

person likely to be in residence on the census night. These entries were carefully checked and all that remained to be done on the census night was to strike out the names of persons not present and to enter the names of any persons residing on the premises who had arrived after the preliminary entries had been made. The great majority of people were enumerated in this way, but arrangements had to be made so that no one, whether he was travelling by train or drifting down a river in a boat or watching in the fields or cutting coal in the bowels of the earth, should slip through the net without being counted. Care had at the same time to be taken that no one was counted twice over. The census staff had therefore a busy time on the night of March 18th. At dawn on March 19th the striking of provisional totals began. The enumerators added up the number of males and females in their blocks and these figures were consolidated for the circles by the supervisors who then despatched their figures post haste to the charge superintendents. The charge totals were then added up and despatched by train or motor car or bicycle or boat or runner, as the case might be, to the sub-divisional headquarters, where a sub-divisional total was struck and reported to district headquarters. The district figures were then reported by telegram to the provincial superintendent and the Census Commissioner for India. So expeditiously was this work done that the figures for two districts—Balasore and Bhagalpur—were received on the evening of March 19th and the total for the whole province was ready by March 24th, the figure so ascertained out of a total of nearly 38 millions being only 2,351 different from the figure subsequently arrived at on a careful check.

4. The next stage was carried out at district headquarters when the entries relating to each of the 37,961,858 persons in the province were copied out on a separate slip of paper. This work was done by paid hands in every district except Palamau and Angul where it was done, with striking success, by school boys. Papers of different colours were used for the different religions and, as a further saving of manual labour, symbols were used to denote sex and civil condition and a few abbreviations were allowed in recording the names of occupations and castes. This work occupied some seven weeks: when work was in full swing 2,696 copyists were employed each turning out slips at the rate of about 500 a day on the average. When the slips had been copied and arranged by sex and religion for each circle they were despatched to the central offices of which there was one for each of the five commissioners' divisions. Here they were sorted for the different tables and the results compiled by districts. The results when ready were reported to the provincial office where the provincial tables were compiled.

5. The final accounts of expenditure have not yet been closed, but so far as can be ascertained at the time of writing the total cost of the census of Bihar and Orissa amounted to Rs. 3,72,928. The total of the "Treasury accounts" in which is included all extra expenditure that would not have been incurred but for the census and which therefore represent the real cost of the census amounted to Rs. 2,82,065 or Rs. 7-6-10 per mille of the population as compared with Rs. 5-5-7 in 1911. The increased cost is due to the high price of paper at census time and to the greatly increased wages that it was necessary to give for copying and sorting the slips.

6. So long as the census is run on its present lines, the first and greatest debt of thanks will always be due to the great multitude of census enumerators and supervisors of whose names there is no record but without whose assistance

the census would be impossible. They have to work hard and many of the supervisors in particular find themselves out of pocket over the work : for this the only reward they can look for is a printed certificate. The non-co-operation campaign was at its height in March 1921; the public was apathetic and threatened at times to become actively hostile; and many of the staff had to face ridicule in addition to trouble and expense on the ground that they had become servants of Government. Fortunately opposition to the census was not part of the non-co-operation programme but it made the preliminary work extremely difficult, and the duties of the district census officers and charge superintendents, most of them sub-inspectors of police distracted at the time by other work, were more arduous and discouraging than they had ever been before. That the great majority of the census staff were coaxed into doing their duties as they did is owing entirely to their efforts and the very greatest credit is due to them. To the district officers also, to whom the census came as an extra anxiety at an anxious time and who readily supplied information and reports on various subjects, thanks are due. The Feudatory States maintained the high standard of efficiency in census organization which they had set themselves on previous occasions. I desire also to take this opportunity of acknowledging the assistance received from various correspondents, most of them non-officials, who very kindly supplied me with information for the report. Amongst these the name of Rai Bahadur Sarat Chandra Roy deserves special mention, he having in particular allowed me to pilfer from his accumulated store of information with regard to the Tana Bhagats. Amongst the deputy superintendents of census I wish to record my special appreciation of the services of Babu Baidya Nath Misra (Orissa), Maulavi Ahmad Husain (Patna) and Babu Rameshvar Singh (Tirhut). The control of a central census office which consists of a large number of piece workers temporarily employed and not readily amendable to discipline was in 1921 a far from enviable task which called for an exacting combination of tact and discipline. My personal assistant, Maulavi Chaudhuri Muhammad Nazir 'Alam, was in charge first of the slip copying of Hazaribagh district and then of all the industrial schedules; subsequently he took charge of the compilation of the provincial tables and was entrusted with some particularly irksome revision work. He discharged his various duties with great diligence and was of great help to me. Finally I desire to acknowledge the assistance received from the Government presses and particularly from Mr. Mackenzie. Owing to shortage of materials and a strike the paper mills failed to supply the full quantity of paper required for the census forms till late in January 1921, although all the forms should have been printed and distributed in the previous year : Bihar and Orissa as a matter of fact received its supply later than any other province. Nevertheless, thanks to Mr. Mackenzie's excellent organization at the Gaya forms press, the last batches of forms were printed and distributed with such celerity that not a single complaint was received of their late receipt. The census forms have to be printed in four languages and their number is legion. Over 4 million schedules and over 40 million slips were printed, to say nothing of the circle lists, covers, house lists, summaries, parwanas, certificates, register innumerable, sorters' tickets and various other forms that were required. To have coped with this mass of extra work successfully and to have distributed the forms without a hitch is a feat that deserves an honourable mention.

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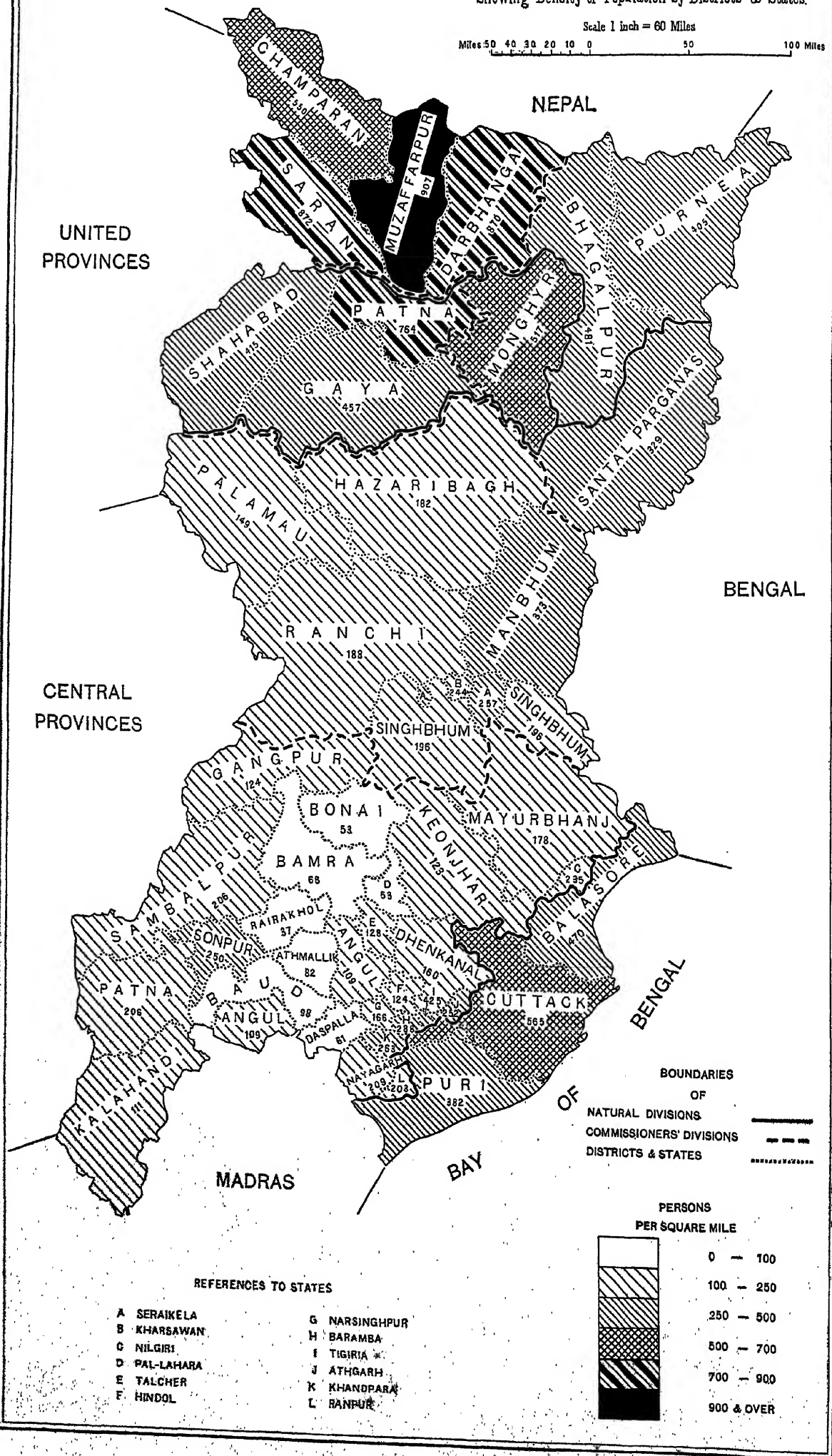
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BIHAR AND ORISSA

Showing Density of Population by Districts & States.

Scale 1 inch = 60 Miles

Miles 50 40 30 20 10 0 50 100 Miles



REPORT

ON THE CENSUS OF

BIHAR AND ORISSA, 1921.

CHAPTER I.

DISTRIBUTION AND MOVEMENT OF THE POPULATION.

WHEN the last census of the population was taken in 1911, Bihar and Orissa still formed a part of the Lieutenant-Governorship of Bengal, for it was not till April 1st, 1912, that the new province was constituted. In view however of the approaching separation of Bihar and Orissa from Bengal the census tables for each of the two provinces were printed in separate volumes. While therefore this is the first separate census report for Bihar and Orissa, Part II of this volume, which contains the Bihar and Orissa census tables, is the second of its kind.

2. The province of Bihar and Orissa covers an area of 111,809 square miles. In 1911, the area was stated to be 111,829 square miles: the difference is accounted for by one or two minor adjustments of the provincial boundary. The population of the area transferred has been estimated for each of the preceding censuses and adjustments have been made accordingly in Imperial Table II and Provincial Table I, so that the population shown there for each census is the population enumerated in that year on the 111,809 square miles of which the province now consists. The difference however is insignificant, amounting for 1911 to 540 persons only. Nor has any alteration of importance occurred since 1911 in the boundaries or area of the divisions, districts or states of which the province is composed. Within the district boundaries there have been some changes. A new subdivision has been formed in Hazaribagh district with headquarters at Chatra, consisting of thanas Chauparan, Hunterganj, Chatra and Simaria which were transferred from the Sadr subdivision, and in Ranchi district a part of the Gumla subdivision consisting of thanas Bano, Kolebira, Simdega and Kurdeg has been created into a new subdivision with headquarters at Simdega. In Darbhanga district the Rouserha thana has recently been transferred from the Sadr to the Samastipur subdivision. In addition to this the usual petty modifications of thana boundaries have also been made and adjustments on this account have been made in Provincial Table I. With these reservations, the area and the administrative divisions of the province are the same as on the day on which it was constituted.

3. Like Gaul, the province is divided into three parts. The northern part is the fertile alluvial plain drained by the Ganges and its tributaries.

NATURAL DIVISIONS. This is a purely agricultural tract and, except where it approaches the foot-hills of the Himalayas in the north of the Champaran and Purnea districts or the spurs of the Chota Nagpur hills in the south, it is cultivated throughout. The central division consists of an undulating laterite formation with rich, winding valleys, open uplands and wooded hills rising at points to over 3,000 feet in height. This division represents roughly what would be left of the province if the sea level was to rise 500 feet. The third and southern division is the strip of alluvial country between the hills and the Bay of Bengal formed by

the deltas of the Subarnarekha, the Brahmani and the Mahanadi rivers. These three tracts are Bihar, the Chota Nagpur Plateau and Orissa, and as each is homogeneous in itself and distinct from the other two in regard to the people who inhabit it no less than in physical features, it is convenient in a census report to consider the province as consisting of these Natural Divisions rather than of the administrative divisions which, having been formed from time to time in accordance with the requirements of practical convenience, do not always coincide with them. It is also convenient to subdivide the vast population which inhabits the valley of the Ganges into two parts, distinguishing the population of the districts which lie to the north of the river from that of those which lie to the south. While therefore the tables in Part II (the separate volume of tables) are arranged according to the administrative scheme of districts and Commissioners' divisions, in the chapters of this volume and the subsidiary tables which are appended to them the province and its population will be considered in these four Natural Divisions. This arrangement is identical with that followed in the previous report and is explained in the following statement :—

DISTRICT OR STATE.

COMMISSIONER'S DIVISION.

I.—NORTH BIHAR.

Saran ...	...	...	...	Tirhut.
Champaran ...	...	...	...	Do.
Muzaffarpur ...	...	...	...	Do.
Darbhanga ...	...	...	...	Do.
Bhagalpur ...	...	...	...	Bhagalpur.
Purnea ...	...	...	...	Do.

II.—SOUTH BIHAR.

Patna ...	...	...	...	Patna.
Gaya ...	...	...	...	Do.
Shahabad ...	...	...	...	Do.
Monghyr ...	...	...	...	Bhagalpur.

III.—ORISSA.

Cuttack ...	...	...	...	Orissa.
Balasore ...	...	...	...	Do.
Puri ...	...	...	...	Do.

IV.—CHOTA NAGPUR PLATEAU.

Hazaribagh ...	...	...	...	Chota Nagpur.
Ranchi ...	...	...	...	Do.
Palamau ...	...	...	...	Do.
Manbhum ...	...	...	...	Do.
Singhbhum ...	...	...	...	Do.
Santal Parganas ...	...	...	...	Bhagalpur.
Angul ...	...	...	...	Orissa.
Sambalpur ...	...	...	...	Do.
Athgarh ...	...	...	...	Orissa Feudatory States.
Athmallik ...	...	...	...	Do.
Bamra ...	...	...	...	Do.
Baramba ...	...	...	...	Do.
Band ...	...	...	...	Do.
Bonai ...	...	...	...	Do.
Daspalla ...	...	...	...	Do.
Dhenkanal ...	...	...	...	Do.
Gangpur ...	...	...	...	Do.
Hindol ...	...	...	...	Do.
Kalahandi ...	...	...	...	Do.
Keonjhar ...	...	...	...	Do.
Khandpara ...	...	...	...	Do.
Mayurbhanj ...	...	...	...	Do.
Narsinghpur ...	...	...	...	Do.
Nayagarh ...	...	...	...	Do.
Nilgiri ...	...	...	...	Do.

DISTRICT OR STATE.				COMMISSIONER'S DIVISION.
Pal Lahara	...	...	...	Orissa Feudatory States.
Patna	...	...	...	Do.
Rairakhol	...	...	...	Do.
Ranpur	...	...	...	Do.
Sonpur	...	...	...	Do.
Talcher	...	...	...	Do.
Tigiria	...	...	...	Do.
Saraikela	...	...	...	Chota Nagpur Feudatory States.
Kharsawan...	...	...	...	Do.

It will be noticed that Bhagalpur and Monghyr districts which are cut into two parts by the Ganges are assigned respectively to North and South Bihar in order to avoid the inconvenience of considering each district in two parts.

4. The object of the Indian as of the English census is to ascertain the actual or *de facto* population of the country by a synchronous count, that is to say that the recorded population of any area in India is the number of persons found and enumerated within the boundaries of that area on the night of the census regardless of their place of residence. In the United States of America the population is enumerated according to "place of abode", in other words it is the resident or *de jure* population that is enumerated; and in various other countries also a question with regard to place of residence is added to the census schedules so as to make it possible to calculate the resident population. No such question is asked in connexion with the Indian census, but by fixing the census at an hour of the day, or rather of the night, and at a season of the year when most people are likely to be found at their homes, the difference between the actual and resident population is reduced as far as possible. In India moreover this difference does not amount to more than a fraction of the proportion it assumes in western countries for the population of India is far more immobile. This statement is becoming less true every year. Nevertheless a population which is predominantly agricultural and for which every season of the year brings fresh work in the fields at home is not likely to wander and, so long as these conditions obtain, the difference between the actual and the resident population will remain relatively small.

5. Through the good offices of a few landlords statistics were collected from 46 villages in different parts of the province illustrating the extent to which the rural population had travelled to various frequented places. Of these villages, 21 were in North Bihar, 22 in Orissa, and 3 in Chota Nagpur. It was hoped to collect statistics from a much larger number of villages, but the figures are perhaps of sufficient interest to reproduce as they stand. It was stipulated that the selected villages should contain at least 100 inhabitants and be at least 20 miles from the headquarters station of the district. Patna was included in the form as one of the places visited as being the capital of the province and Gaya and Puri as being popular places of pilgrimage. The results obtained were as follows :—

		Population dealt with.	NUMBER OF PERSONS WHO HAD VISITED					Any place in India outside Bihar and Orissa other than Calcutta,	Any place outside India.
			Patna.	Gaya.	Puri.	Calcutta.			
Males	...	19,354	153	245	1,736	2,179	165	} 114 *	29
Females	...	19,485	18	52	1,499	101	56		

* Sex not specified.

Most of those who had visited Puri and Calcutta came from Orissa; the majority of those who had visited any place in India outside Bihar and Orissa other than Calcutta had been to the tea gardens; all of those who had been outside India had been to Basra, except three who had been to France, no doubt

in every case in a labour corps. Assuming that no person is mentioned more than once in the forms (which is improbable) less than one man in four and less than one woman in ten of the population dealt with had visited any of the places mentioned.

The immobility of the population can be illustrated better from the statistics of railway tickets taken. This information was compiled for the two years, September 1918 to August 1920 which included the period of scarcity. There are two seasons of the year at which tickets are taken in large numbers: the number rises steadily from December to May; it then sinks for three or four months, but rises again in October and November. These fluctuations are least in Orissa; they are rather more marked in the Chota Nagpur Plateau, especially the upward trend in the hot weather. In North and South Bihar they are very conspicuous: for instance in December 1919, 850,000 tickets were taken in North Bihar and 540,000 in South Bihar; the number then started to rise until in May 1920 the highest point of the period was reached and 1,500,000 tickets were taken in North Bihar and 1,000,000 in South Bihar, or nearly double the numbers taken in the preceding December. At first these figures seem large, but when compared with the population it is seen that they are not so: on the average, during each month of the period, in South Bihar only one person in 11, in North Bihar one in 13, in Orissa one in 27 and in the Chota Nagpur Plateau one in 31 took a railway ticket. These figures give perhaps as accurate an idea of the relative extent to which people travel in the different parts of the province as it is possible to get.

6. In India, therefore the difference between the actual and the resident population is a less important matter than in many countries where a census

SPECIAL ARRANGEMENTS.

is taken and the general rule is that where a man sleeps on the census night there he is enumerated. But there are some exceptions to this rule: some persons, for instance railway servants at work on the line, are out by themselves at night in circumstances that make it impossible to enumerate them; in these exceptional cases the persons were treated as if they had been present in their homes and enumerated there. In Bihar and Orissa moreover there are tracts of country in which owing to the scarcity of literate persons qualified to act as enumerators, the remoteness of the villages, the impassable nature of the country or the presence of dangerous animals, it is impossible to arrange for the enumeration to be completed on the census night. In these areas exceptional arrangements were made to take a census of the population actually present shortly before sunset on the census night. The difficulty of taking the census in the Khondmals subdivision of Angul was even greater because owing to the general illiteracy the census staff had to be imported whole and was therefore smaller in proportion to the population to be enumerated and took longer over its work than that employed elsewhere. Here the enumeration was spread over three days and therefore was an enumeration of the resident population: but as the tract is remote and the population small and practically stationary, the difference between the number of persons so enumerated and the number of persons present in the area on the night of March 18th can safely be neglected.

7. The population at the time of the census may be said to have been normal. This is indeed the time of year when a considerable part of the

NORMALITY OF POPULATION.

population is away seeking its bread in Bengal or elsewhere; but this is a constant feature of every census. On the present occasion the movement from Bihar was less and that from Chota Nagpur and Orissa was greater than usual. Plague caused very little displacement of the population except in the small town of Sahibganj; the number of pilgrims at Puri was smaller than usual, and the crops in the Mokameh Tal, which often attract many thousands of labourers just at the census time, had already been cut. Crop-cutting was still in progress in some of the *tals* in west Monghyr, but the number of labourers at work was not great. There were no special fairs or other gatherings on March 18th. Marriages take place at this time of year and the bridegrooms' parties which visit the houses of the brides' parents may number hundreds or even thousands of persons and prove a source of much anxious thought to the local enumerator;

but no difficulty was experienced on this account either. Some thousands of immigrants from Chattisgarh had flocked into Singhbhum just before the census under pressure of scarcity in their native districts and caused considerable difficulty in the census of Jamshedpur. Apart from this and from the usual cold weather emigration, no large movement of the population of any sort was in progress at the time of the census.

8. The general standard of accuracy in enumeration is reported to have improved down to the year 1891 when it "left but little room for further improvement", and except in the case of some

ACCURACY OF ENUMERATION.

of the Feudatory States it is improbable that any noticeable improvement has taken place since then so far as the exhaustiveness of the enumeration is concerned. On the present occasion a special difficulty was experienced. The census fell at a time of much political excitement when the non co-operation movement, the avowed object of which was to paralyze the activities of Government, was in full swing. In these circumstances it was inevitable that anxiety should be felt as to the success of the census which is taken under the orders of Government but which depends for its success and accuracy on the voluntary co-operation of a host of unofficial and unpaid workers. A few days before the census Mr. Gandhi published a notice to the effect that it was the duty of Indians to co-operate with Government in the matter of the census, but the notice, while it made it clear that opposition to the census was not part of the non-co-operation programme, was published too late to produce much effect. Although however the movement was not avowedly hostile to the census, it created an atmosphere in which it was difficult to make headway with the preliminary arrangements. Persons selected as supervisors and enumerators were only too glad to be able to say that it was against their conscience to accept appointment and much valuable time was wasted in finally selecting the staff. Moreover, even after appointment, many of the staff still found it difficult to take any interest in their work and the District Census Officers had a very arduous task in keeping the work up to date. The fear that the public might "go on strike" on the census night and refuse to answer the questions prescribed proved quite unfounded and there was hardly a single case of deliberate obstruction by members of the census staff: one enumerator in Gaya burnt his enumeration book, but it was quickly rewritten and the man proved to be mad; in Palamau one supervisor deliberately caused delay in handing over his papers. These were the only cases of obstruction reported. The danger of the non-co-operation movement therefore lay not in active attempts to wreck the census, but in the indifference it encouraged in the staff. In Patna City the difficulty was perhaps greater and the preliminary arrangements more delayed than anywhere else: the gentlemen originally selected (with some honourable exceptions) showed such a lack of interest that it was found necessary at the last moment to transfer the chief responsibility to the police, and this eleventh hour change naturally did not tend to efficiency in enumeration. Yet even here it is doubtful if the omissions exceeded a thousand or two. The town was mercifully free from plague on the present occasion which had been the enemy at previous censuses and, if one difficulty is set against the other, it may be said that the enumeration here, if no better, was at least no worse than on previous occasions. Elsewhere also the difficulties engendered by non-co-operation were generally greater in the towns where people are more politically minded than in the villages. But the proportion of persons who live in towns is very small, being only 37 per mille of the total population.

Special difficulties, not connected with non-co-operation, existed at Jamshedpur. The bulk of the population consists of unskilled labourers in the employ of the Tata Iron and Steel Company or of the contractors engaged in the development of the town, or else in search of work and unattached. This population is always a moving one whose homes are elsewhere, and at the time of the census it was specially so. A large influx of coolies from the areas of Chattisgarh in which scarcity prevailed had been flowing into the town for some weeks previously who squatted wherever they were allowed to do so: they were also constantly on the move, one day they would be found at one place and the next a mile away. A further difficulty was that the census came

on the top of an outbreak of cholera as the result of which a great many of the labourers had returned to their villages, while others went out into the neighbouring jungle and camped there temporarily till the outbreak was over. The Tata Iron and Steel Company gave every assistance in connexion with the census, but in the circumstances it was inevitable that omissions should occur. The cholera outbreak alone probably meant that some thousands of people had left the town just before the census and if allowance is also made for omissions it would probably be reasonable to say that the normal population of the town at the time of the census was about 65,000. This rough estimate is corroborated by the fact that an estimate made locally a year later of the population then on the acquired area came to 70,000.

9. Doubts of a more serious kind as to the accuracy of the census are suggested by the fact that there is a much greater divergence between the

COMPARISON WITH VITAL STATISTICS. results of the census and the vital statistics than there was in 1911. If the natural increase of population that occurred in 1901-10 as shown by the vital statistics be added to the actual population of 1901, the result is 668,000 more than the census figure of 1911; if the intercensal increase of the decade 1911-20 as recorded in the vital statistics be added to the actual population of 1911, the result is 1,727,000 more than the census figure of 1921. The vital statistics are collected in rural areas in forms called *hath chittas* which are handed in on weekly or fortnightly parade days by 67,000 village-chaukidars at 242 police-stations, where they are compiled by writer constables and sent in the form of monthly returns to the Civil Surgeon of the district. In municipalities beat constables take the place of the village-chaukidars but otherwise the procedure is the same. On railways the reporting agency is the station-master. The reports received from these sources are compiled into district returns in the Civil Surgeons' offices and the provincial returns are prepared in that of the Director of Public Health. The agency which prepares the original *hath chittas* is generally illiterate and the information contained in them is generally unchecked. The vital statistics are admittedly not accurate at any time and during the influenza epidemic, when the population of whole villages and with it the reporting staff was blotted out, many thousands of deaths must have gone unreported. A large number of deaths must also have escaped registration because the influenza epidemic coincided with the season of highest emigration and many emigrants from Bihar and Orissa must have perished outside the province; if therefore these deaths were recorded at all they were not recorded in Bihar and Orissa. On the other hand the census record is prepared by a better qualified staff than the *hath chittas*: the staff is carefully instructed and every entry is checked, sometimes by two separate persons. Without making any exaggerated claims on behalf of the census record it may safely be said that a much stronger presumption of accuracy attaches to it than to the record of births and deaths, and that this presumption is made stronger still by the occurrence of the influenza epidemic. The effect of this epidemic upon the vital statistics is undoubtedly the main cause of the difference between the recorded actual and natural growth of the last decade, and the discrepancy cannot therefore be used by itself as an argument for the wholesale inaccuracy of the census figures. A curious fact about the difference is that it is much more marked in the case of the female than in that of the male sex; this point is considered further in Chapter VI, but meanwhile it may be pointed out that, when wholesale omissions occur in a census, both sexes tend to be omitted in more or less equal proportions and not three females for every one male. Interesting light is thrown on the standard of accuracy of the vital statistics and the decrease of the female population by an experiment made by the local Government whereby a continuous record of the vital occurrences of a small selected area in Muzaffarpur district was maintained for a period of five years. A note on the subject is reproduced as an appendix to this chapter. The general results that emerged were that there were considerable omissions in the vital occurrences reported by the police, but that the standard of the police reports in this particular area improved as the result of the presence and possibly co-operation of the rival reporting staff. The data are insufficient to form any conclusion as to the general standard of omissions either in the province as a whole or in

Muzaffarpur district, but the fact that such omissions occur is sufficiently clear. The experiment is also interesting as confirming the reality of the decrease of population, especially of the female population, in Bihar. Generally speaking there appears to be no reason to suppose that the present census was appreciably behind its predecessors in point of accuracy. It is probably true that greater friction was created in the preliminary processes than had been created at any previous census: it is also true that the charm of novelty has gone and that whatever interest the census may originally have had for the general population has now been lost, but complementary to this the fear and resentment caused by the early censuses in the backward districts have disappeared. So far as can be gathered from reports received from different parts of the province and from casual conversation, when it came to the point the efforts of the District Census Officers prevailed and surprisingly little effect was produced by non-co-operation on the accuracy of the final census.

10. On March 18th, 1921, Bihar and Orissa was found to contain a population of 37,961,858 persons. The distribution of this population between the Natural and Administrative Divisions of the province is shown in the following statement:—

AREA AND POPULATION.

NATURAL DIVISIONS.

NATURAL DIVISION.	Area in square miles.	Population.	Mean density per square mile.
North Bihar	21,822	14,007,646	642
South Bihar	15,076	7,574,003	502
Orissa	8,231	3,996,833	486
Chota Nagpur Plateau ...	66,680	12,383,376	186

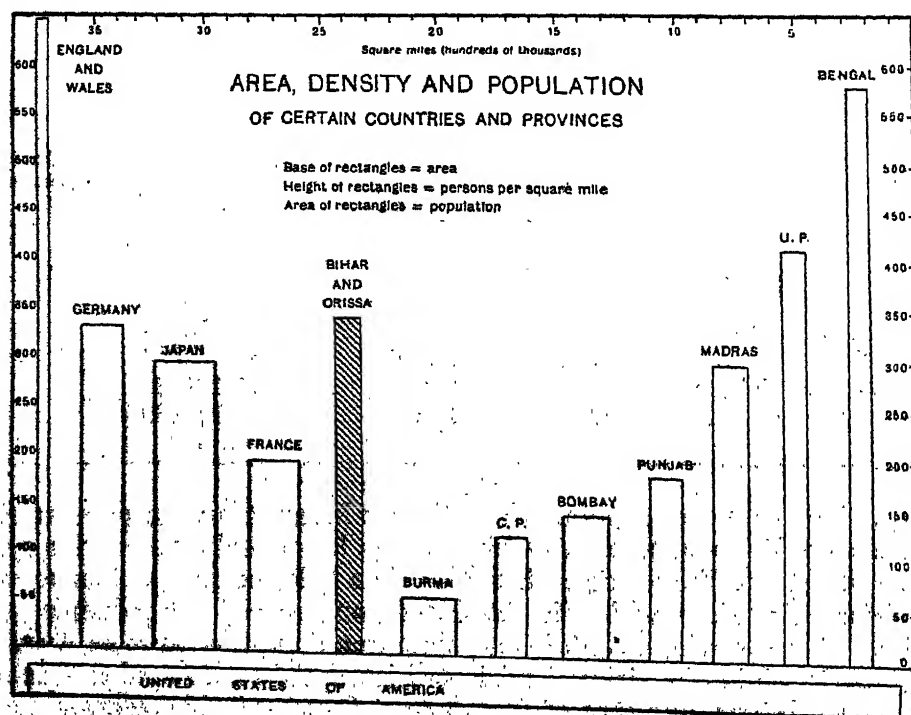
ADMINISTRATIVE DIVISIONS.

ADMINISTRATIVE DIVISION.	Area in square miles.	Population.	Mean density per square mile.
Patna Division	11,149	5,544,038	497
Tirhut Division	12,598	9,949,268	790
Bhagalpur Division ...	18,613	7,886,982	424
Orissa Division	13,736	4,968,873	362
Chota Nagpur Division ...	27,065	5,653,028	209
Feudatory States	28,648	3,959,669	138

The province supports a population slightly larger than the population of England and Wales on an area nearly twice as large, and a population nearly as large as that of France on rather more than half the area of that country. The Orissa Division, which is the least populous of the administrative divisions of the province, contains a population almost as large as Australia (5,024,000) while the Tirhut Division which is the most populous contains a population larger than that of the whole of Canada (9,030,000) and nearly twice as large as that of Australia. Amongst the provinces of India Bihar and Orissa stands fourth in area and population, Burma, Madras and Bombay exceeding it in area and Madras, Bengal and the United Provinces in population. In point of density of population Bihar and Orissa stands third in India after Bengal and the United Provinces. But, if the Chota Nagpur Plateau which includes more than half of the area but only one-third of the

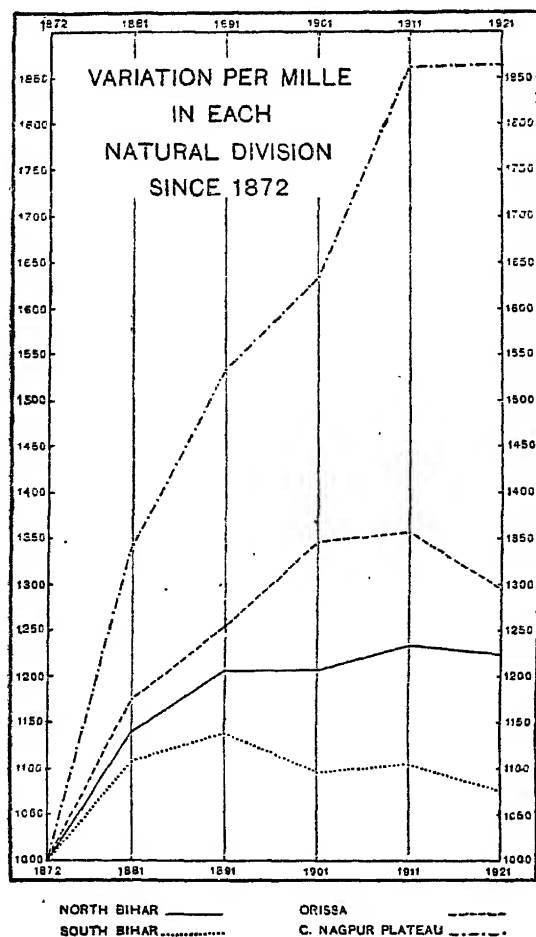
population of the province be omitted, the density of population in the other three Natural Divisions comes to 567 persons to the square mile which is much greater than in the United Provinces and nearly as great as in Bengal which includes Calcutta. If the provincial population was evenly distributed over the face of the province there would be a distance of 107 yards from one person to the next: but if the population of North and South Bihar and Orissa was evenly distributed over its proper area the distance from person to person would be only 82 yards. Even in England and Wales, where 79 per cent. of the population live in towns, the density only rises to 649 persons to the square mile. The density of population in these three Natural Divisions may therefore be said to be great. The province is compared to certain other countries and provinces in the following table and diagram:—

COUNTRY OR PROVINCE.	Area.	Population (000s omitted.)	Density per square mile.
Bihar and Orissa	111,809	37,962	340
England and Wales	58,344	37,885	649
Germany	183,381	60,900	332
Japan	260,738	77,006	295
France	212,659	41,476	195
United States of America	3,695,100	117,858	32
Burma	233,707	13,212	57
Central Provinces and Berar	131,052	15,980	122
Bombay	186,994	26,701	143
Punjab	136,705	25,101	183
Madras (excluding Travancore and Cochin).	143,852	42,794	297
United Provinces	112,440	46,511	411
Bengal	82,244	47,592	579



11. The first regular census of the province was taken in the year 1872, forty-nine years before the census which forms the subject of the present report. Various attempts had been made previous to 1872 to estimate the population of the province, reference to which will be found in previous census reports and in the settlement

reports of the different districts. These estimates were, however, based upon



mere guess-work. The last one previous to 1872 was made in 1870 when the population of Bengal (as then constituted) was held to be "about 42 millions or less by more than a third than the figure ascertained by the first regular census of the province which was taken in 1872"—which census, it may be added, was itself admittedly incomplete. As the series of regular censuses now extends over half a century no attempt will be made to discuss the accuracy of any estimate made previous to 1872. The figures showing the variations in the population of districts since 1872 are contained in Imperial Table II. The actual population at the last two censuses and the percentage of variation for the last two decades for every revenue thana will be found in Provincial Table I at the end of the same volume, while proportional figures illustrating important features of the variations in the Natural Divisions will be found at the end of this chapter.

The marginal diagram illustrates the variation in each Natural Division at each successive census per mille of the population in 1872. Its outstanding feature is the generally declining rate of increase down to the year 1901. The rate accelerated again in the decade 1901—1911, but was converted into an actual decrease in the last decade.

12. Between 1872 and 1881, the increase of population was greatest in the Chota Nagpur Plateau but this is largely fictitious because the first census in this wild and hilly country was specially difficult to take and the enumeration was correspondingly defective. In North and South Bihar also the increase of population in this decade must be partly discounted on the same ground: fresh enumerations were ordered of the population of two different parts of Darbhanga district in the course of the next few years which revealed an increase of 20 and 25 per cent. respectively over the recorded population of the same areas in 1872. On the other hand in the case of Orissa there are grounds for supposing that the increase is more genuine, for Orissa was then recovering from the effects of the great famine of 1866 and one of the invariable features of such periods of reaction is a rapid increase of the birth-rate. It is impossible now to say how far the census figures of 1872 understate the actual population, but in his census report for 1901 Sir Edward Gait states that "it would probably be quite safe to assume that but for this disturbing feature the excess of the figures for 1881 over those for 1872 would have been less than the increase disclosed by the present (*i.e.*, 1901) census as compared with 1891".

13. In the decade 1881—1891, when there was an increase of 7·5 per cent., allowance has again to be made for more accurate enumeration at the latter census. In 1881 there had been disturbances in connexion with the census in the Santal Parganas; the Census Superintendent remarked on the improved standard of enumeration in Singhbhum and the Orissa States and considered that two-thirds of the

recorded increase in the population of the Chota Nagpur States was due to improved enumeration. The greater part of the Chota Nagpur States as then constituted has passed over into the jurisdiction of the Central Provinces, but it is clear that an appreciable part of the continued rapid increase in the population of the Plateau shown in the diagram is unreal. The increase in Bihar occurred chiefly north of the Ganges in the district of Saran and along the foot of the Himalayas—where also it was partly the result of better enumeration. South Bihar was affected by a fatal type of fever which seems to have advanced northward from the Presidency and Burdwan Divisions of Bengal. Orissa was still recovering from 1866 and showed a general increase of population: the increase was least in Balasore which, like South Bihar, suffered from an invasion of the so-called “Burdwan fever” from Midnapur.

14. Writing of the census of 1901, Sir Edward Gait expressed the view that there had been no appreciable improvement in the matter of accuracy since 1891. In that decade (1891—1901) there

VARIAION, 1891—1901.

was an increase of about 1·8 per cent. The population of South Bihar was reduced by the plague. North Bihar was stationary: a famine had occurred here in 1896-97, but so far was it from being the case that the famine had reduced the population, that it was conclusively shown that the areas in which the greatest increase of population had occurred were just those that had felt the stress of famine most acutely. Orissa was still enjoying “a placid period of peaceful development”, the increase being well distributed throughout its three districts. In the Chota Nagpur Plateau the full extent of the increase in the population was obscured by the amount of emigration that took place.

15. During the next intercensal period the population of the province increased by 5·1 per cent. The first four years of the decade were fairly prosperous and healthy; then came three bad years in which famine had to be declared in Darbhanga,

VARIAION, 1901—1911.

Ranchi and Puri districts and then a return to prosperity. In North Bihar there was a general if slight increase in every district except Saran (—4·94 per cent.) which had as usual suffered from plague and the population of which had emigrated in large numbers in search of work. The greatest increase occurred in Purnea (+5·98 per cent.) and Champaran (+6·59 per cent.) where the density of population is least. South Bihar, which was also severely affected by plague, was only saved from a decrease by the steady growth of population in Monghyr and by the fact that the figures for Gaya, which in 1901 had been reduced by an epidemic of plague occurring at census time, had returned to normal. The peaceful progress of Orissa was interrupted by floods, scarcity and disease and the census returns were further affected by the greatly increased number of emigrants. By far the highest rate of increase was recorded in the Chota Nagpur Plateau: this was ascribed partly to more complete enumeration (especially in the Orissa States where the recorded rate of increase was 20 per cent.), partly to the fact that Ranchi and Sambalpur were recovering from the effects of famine, partly to the growth of industrial concerns in Manbhum and Singhbhum, and partly to the natural growth of a prolific aboriginal population. The only exceptions to the general increase in this Natural Division were two thanas in the west of Hazaribagh, where there had been scarcity and from which a considerable amount of migration had occurred towards the coal and mica mines in the east, parts of the Santal Parganas from which migration had been taking place on an unprecedented scale, and the Sadr subdivision of Angul and the adjoining Dhenkanal State in the south where there had been scarcity in 1908.

16. Before considering in detail the variations of the population in the different parts of the province since 1911, it is necessary to give some account of the vicissitudes of the last decade which have

CONDITIONS OF MATERIAL WELFARE.

affected the well-being and the number of the people. From the material point of view the first necessity of life is an adequate supply of nourishing food. The vast majority of the population

of Bihar and Orissa are vegetarians, whose diet consists of food-grains eked out with vegetables. A full day's meals consist of two main meals, one at midday and one at night, with two minor meals, one first thing in the morning and one in the late afternoon. The main meals generally consist of boiled rice accompanied with pulse boiled in water and vegetables cooked in oil, though *gondli* may be substituted for the rice and jungle leaves or roots for the vegetables in Chota Nagpur. In Bihar for the midday meal of rice the agriculturist will often substitute a meal of maize, oats, gram, *marua*, or some such grain according to the season either in the form of cakes or else of flour (*sattu*). In North Bihar the midday meal sometimes takes the form of flaked rice with curds and molasses. At the evening meal cakes of maize, etc., or in Orissa cakes of rice are very commonly substituted; amongst the upper classes cakes of wheat are preferred. For the two light meals flaked or parched rice or parched gram or maize or in well-to-do families wheat cakes cooked in *ghi* with sweet-meats are commonly taken. In Orissa, the Chota Nagpur Plateau and Purnea the early morning meal nearly always consists of the cold boiled rice left over from the previous evening's meal and the afternoon meal is often not taken at all. In Orissa meals are only cooked once a day in the evening, though in Bihar the two main meals are usually cooked separately. In Chota Nagpur the *mahua* flower also forms a very useful food. The flowers are collected as they fall from the trees and dried in the sun; they are then either made into cakes with ground *marua* or rice or they are boiled with a flavouring of tamarind stone and then cooked and eaten. Meat if taken at all is usually goat's meat or mutton or in rarer cases chicken: beef is less eaten amongst the upper classes of Muhammadans than it was. Meat may be taken at either of the two main meals and so also fish, which is more eaten in the winter months. Labourers in Bihar when they eat fish usually eat it fried with cakes of ground maize. Food-grains therefore form the greater part of the people's food and amongst food-grains rice is the most important. In Orissa rice is all important and elsewhere, though other grains when they are in season may be eaten at the principal meals, rice will always be preferred. Information collected by the members of the Chanakya Society of Patna College with regard to nearly 4,000 families of different castes in Bihar shows that the proportion of families which eat fish or meat at all is only 39 per cent. of the whole number, 55 per cent. in North Bihar and 31 per cent. in South Bihar. The proportion of families in which these articles are eaten regularly is only 2·4 per cent.; in the others they are eaten only on special occasions or in the cheap season. Similarly milk is consumed only in 85 per cent. of the families which came under investigation, *ghi* in 76 per cent. and sugar in 87 per cent.; and the consumption of all these articles is generally confined to special occasions or the cheap season.

This rice and these other food-grains are produced locally. An examination of the imports and exports of food-grains shows that in five out of the last ten years the exports of rice from the province have exceeded the imports. When the rains and the crops failed in 1918, rice had to be imported in such quantities as was possible, but the total volume of the imports in 1919-20 amounted to only about 4 per cent. of the outturn of the autumn and winter rice crops that had failed and represented therefore the merest fraction of the total consumption. The trade in paddy is on a smaller scale and less important than the rice trade; large quantities are however imported from Nepal, and the imports habitually exceed the exports. Gram and pulses are exported in large quantities chiefly from Bihar and the province derives a steady income from this source. Wheat also is generally exported, but wheat-flour is imported. In the other food-grains the balance between exports and imports varies with the season. The total value of the recorded imports of food-grains for the last ten years exceeded that of the reported exports by Rs. 376½ lakhs, so that there was an adverse balance to be paid for at the rate of Re. 1 a year for every 10 persons in the population. Speaking generally, however, the province feeds itself, and Imperial Table XVII shows that the production of their own food-supply still constitutes the main occupation of the people. The vast majority of the people of the province are either directly engaged in or dependent on agriculture and many others

pursue it as a subsidiary occupation; all these persons are directly interested in the outturn of the crops. But the importance of the year's crops is not confined to the agriculturists, for the fact that everybody depends on the local crops for his daily food gives even the non-agricultural classes a vital interest in the harvests. Paradoxical as it appears at first sight, it might even be argued that the non-agricultural classes are more affected by a poor crop than the agriculturists proper: for a poor crop means a rise in the price of food-grains and a rise in the price of food-grains is more felt by a consumer who has to purchase his whole supply than by one who raises the whole or part of his supply on his own fields: in fact, provided the agriculturist can produce a surplus over his own requirements, the higher the price rises the better it will be for him. And the recent experience of 1919 proved the force of this contention, for the classes most affected by the scarcity and high prices of food-grains were not the agriculturists but the landless labourers whose services no body required or could pay for and the professional classes on fixed income. It is necessary therefore before relating the ups and downs of the last ten years to emphasize the obvious fact that the material well-being of the whole population, agricultural and non-agricultural alike, depends primarily upon the local crops and above all upon the rice crop, which depend in their turn on the quantity and distribution of the rainfall.

17. The year of the last census (1911) was the third of three years of good harvests. Deficient rain in July affected the *bhadai* crop to a certain extent and delayed the transportation of the *aghan* but except in Orissa there was an excellent *hathiya*

CONDITIONS OF LAST DECADE.

rain which ensured a prosperous year. The price of rice was low and the exports of rice were much in excess of the imports. The year was not however a healthy one: in the hot weather there was a violent outbreak of plague in Bihar, and cholera and "fever" also claimed an unusually large number of victims. To "fever" may be ascribed, in addition to fevers properly so-called, all deaths from causes which the village chaukidar who reports them is not able to diagnose and the number of deaths under this head is therefore a fairly accurate indication of the general healthiness or unhealthiness of the year. Next year the *hathiya* favoured Orissa but failed in the rest of the province, with the result that the crops generally were not good and prices rose: but the dry autumn was apparently as favourable to the public health as it was bad for the crops, for the provincial death-rate for the year dropped by over 11 points per mille. In August of 1913, floods damaged the *bhadai* crop in South Bihar and Orissa but otherwise crops were good and the year was healthy. In 1914, the rainfall was deficient and badly distributed and crops were poor. There was a marked increase in the imports and decrease in the exports of rice; prices rose and there was some distress in Hazaribagh, Palamau, Angul and parts of the Santal Parganas. On other hand, apart from a particularly virulent outbreak of plague in Bihar which caused 24,000 deaths in March alone, the year, as is usually the case with years of deficient rainfall, was an exceptionally healthy one and the death-rate (28.3 per mille) was the lowest that had been recorded in this century. It was in the autumn of this year that war was declared but over two years were to elapse before its effects began to be felt in Bihar and Orissa. The monsoon of 1915 began badly and the *bhadai* crop was again affected, but from September onwards the rainfall recovered itself with the result that there was a fair *rabi* crop and a good crop of winter rice. Neither this year nor the next, which was also a year of good crops, was unhealthy although there was a universal fall in the birth-rate in 1916. 1917 was a year of good rains, bumper crops and low prices of food-grains, but it was an unhealthy year and by this time the war had begun to make itself felt in the increasing prices of imported commodities, such as cloth, salt and oil.

18. Hitherto the course of the decade had been generally prosperous and it is interesting to consider what might have been the population of the province if a census had been taken in March 1918. It will be safer to make the calculation on the basis of the increase that occurred between 1891 and 1911, for the rapid increase

ESTIMATED POPULATION IN MARCH 1918.

that is shown to have occurred previous to 1891, is partly illusory and the result of more efficient enumeration. In these twenty years therefore there was an increase in the provincial population of 2,530,000 or at the rate of 126,500 a year. Seven years' progress at this rate would give Bihar and Orissa in March 1918 a population of 39,820,000 or 1,358,000 more than that actually recorded in 1921. But the years preceding 1918 were years of exceptionally high birth-rates and low death-rates and it is probable that the increase calculated on the arithmetical average is below the number. Calculated according to the formula for geometrical increase the population in March 1918 was 39,352,000. It seems likely that if a census had been taken in March 1918 the population recorded would have been not far off 39,500,000 or a million and a half more than the population recorded in 1921.

19. The first sign of trouble in 1918 was an acute outbreak of cholera in the hot weather: in that year over 200,000 deaths occurred from this disease.

THE INFLUENZA EPIDEMIC. In July the influenza was first noticed in the headquarters stations of the districts in a not particularly acute form. Then after a lull of a few weeks it began in September to spread rapidly along the routes of communication. It was frequently combined with an attack of pneumonia, and this in the majority of cases proved fatal. Before the end of this year, 17.2 per mille of the population or over half a million of persons had perished from the disease in the British districts alone. Greater havoc was wrought in the rural than in the urban areas: the death-rate from fever in 1918, when influenza was the most important item under this head, was 40.6 per mille in the former and 23.6 in the latter. The districts which suffered most were Gaya, Shahabad, Palamau, Ranchi and Hazaribagh. Those which suffered least were the coastal districts of Orissa, Purnea and the Santal Parganas, in which the outbreak had been most acute in October, earlier than elsewhere; it is probable that the warmer and damper air of October was more favourable to recovery from pneumonia than the winter months. The disease spread to the most remote villages and quickly reduced many of them to a state of complete disorganization. As a rule whole villages were attacked at a time so that it was impossible to make arrangements for nursing the living or even for burying the dead, and the medical staff at the dispensaries and hospitals whose work brought them into close contact with the disease were themselves attacked in many cases so that they too were unable to give much assistance. The experience of an officer who toured in a badly affected part of Mayurbhanj State will give some idea of how the epidemic penetrated to the most remote parts and of the state in which it left them. This officer was no doctor but having himself just recovered from an attack of influenza he had some knowledge of the sort of medicine and treatment that were required. Before starting on his tour he had large quantities of the medicine that had been prescribed in his own case made up at the local hospital and procured from Calcutta some thousands of an anti-influenza pill that was being widely advertized at the time. These were distributed by every agency available. Ninety per cent. of the medical staff were ill, absent or dead, so officers of the Public Works, Excise, Forest and other departments and village headmen were employed in the good work. The officer himself took quantities of the medicines on elephants and wherever he pitched his camp he was besieged by hundreds of people with bottles all wanting some of them. His stock was soon exhausted, so he repaired to a small outlying dispensary to get some more. But the dispensary was locked-up and deserted, and the staff nowhere to be found. He therefore broke it open and made up his prescription with his own hands using, in his own words, "rough quantities and by guess. There was no great danger in this as I knew that the drugs used would have no harmful effect even if slightly excessive doses were given. The ingredients in my prescriptions were very soon exhausted and I then served out such things as chlorodyne, camphor, essence of ginger, essence of peppermint and any thing that I thought would do good". At the next dispensary visited there was still one member of the staff about so the preparation of the medicines there was an easier task. The same officer relates how when he came to the chief village of the *pir* there was only one person in the whole of it able to sit

up, and he was the man who had been attacked first. "No attempt was made nor could it possibly be made to bury or burn the dead. The corpse lay for a long time in the house and eventually all that was done was to put a rope round it and drag it a short way from the village". The disease wrought great havoc amongst the aborigines. When first attacked many of them, especially the Santals, would sit in the sun with practically no covering on; then, when they began to feel worse and to think that their life was likely to be short, they decided that it should at least be gay and took a good drink of liquor and a hearty meal of goat's flesh. This treatment is the exact antithesis of that generally recommended, so it was inevitable that a great many cases amongst the aborigines should develop into pneumonia and end fatally. It was reported that the influenza was more fatal to the poor than to the well-to-do and the reason for the difference was probably that the well-to-do could take to their beds and stay there quietly with some one to look after them. The same cause probably accounts for the fact that towns fared better than villages, for there are more people in towns to give assistance and a sick man is less dependent on his own resources. There is no evidence that the disease originated in malnutrition though it is likely that malnutrition was an important factor in determining the issue. It is estimated that from 50 to 80 per cent. of the population of India were attacked. Bihar and Orissa lay between the province which suffered most, the Central Provinces, and that which suffered least, Bengal, and in comparison with other provinces it escaped relatively lightly. Nevertheless no other epidemic has left so deep a mark on the population of the province and references to it will be constant in the pages that follow.

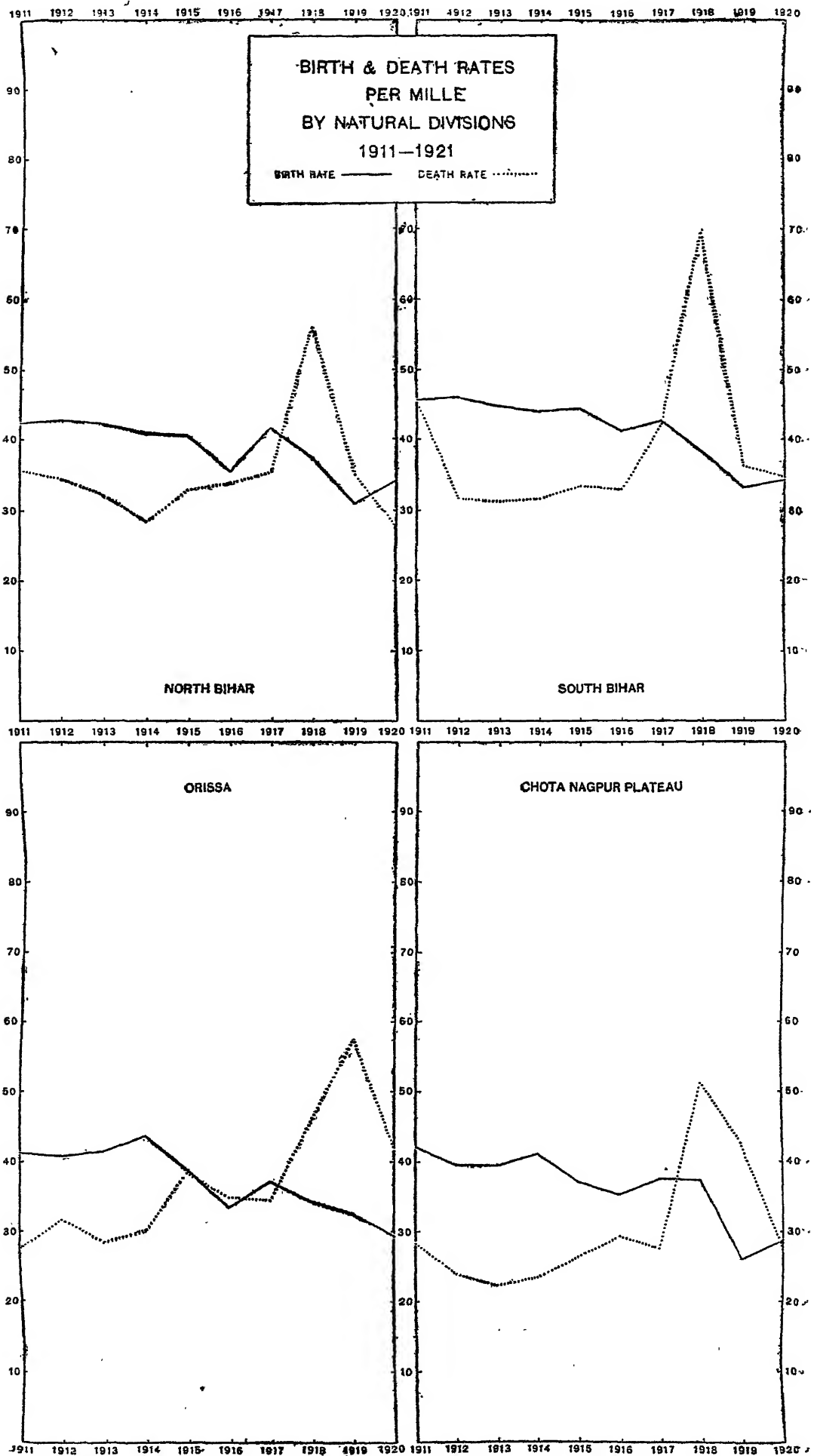
20. While the influenza epidemic was raging, other trouble was brewing. No rain fell after the middle of September till the middle of the following

FAILURE OF RAINS IN 1918.

January with the result that the crops were universally poor, the outturn of the winter rice crop being only 60 per cent. of the normal. The failure unfortunately was not confined to Bihar and Orissa, but was general throughout India, so that food-grains could only be imported at high prices. Meanwhile the prices of imported commodities also continued to rise. For the last months of this year and in 1919 the distress was acute and general. There was famine in parts of Angul, Bhagalpur and the Santal Parganas, but the number of persons employed on relief works never exceeded 3,000. On the other hand it was found that in a great number of cases the family breadwinner had perished in the epidemic of the previous year or else that he had emigrated in search of work and left his dependants with nothing to depend upon but charity: gratuitous relief therefore was required on a large scale in many districts and as many as 74,000 persons were relieved in this way. Temporary emigration swelled to a flood. The only type of emigration which can be definitely measured is that to the tea gardens of Assam. In 1917-18 the number of "souls", *i.e.*, workers and dependants, recruited for Assam in this province was 11,246; in 1918-19 this number increased over tenfold, the number of persons recruited amounting to 196,336. If another 28,000 persons sent to the tea gardens in the Duars be included, over 80,000 persons left Ranchi and Palamau for the tea gardens in that year, while over 50,000, mostly from the Orissa States, left Cuttack and Balasore. The monsoon of 1919 was abundant; in Orissa there were disastrous floods, but elsewhere the general distress disappeared with the reaping of the winter rice crop. As the result partly of the number of deaths that had occurred in 1918, partly of the emigration of males, and partly of the lowered vitality of the population, the birth-rate this year fell to only 30·4 per thousand. The last year of the decade (1920) was a year of badly distributed rain and crops below the average, but it was healthier than its immediate predecessors.

21. The effects of these visitations are illustrated in the diagram on the opposite page in which are shown the birth and death-rates of each Natural Division year by year from 1911 to 1920. In North Bihar the birth-rate shows a slight tendency to decline till 1915; in 1916 there is a marked decline but it recovers itself

NATURAL DIVISIONS COMPARED.



in 1917. Meanwhile the death-rate also shows a tendency to decline till 1914 after which it rises steadily till 1917. In 1918, owing to the cholera but still more to the influenza epidemic, the death-rate soars up and the birth-rate drops away below it, but by 1920 the birth-rate is restored to its proper place above the death-rate. The prominent feature is the peak formed by the death-rate line in 1918. This is even more marked in South Bihar. Here the birth-rate follows a very similar line to that of North Bihar: the death-rate starts higher, then drops and remains fairly steady for five years, soars up high above North Bihar in 1918 and does not recross the line of the birth-rate before the end of the decade. The lines in the Chota Nagpur diagram are not dissimilar, but the death-rate line forms a less prominent feature in 1918 and remains well above the 40 per mille line in 1919; the birth-rate on the other hand falls lower in 1917 than it does in Bihar. In Orissa the fall of the birth-rate in 1916 takes the line below the death-rate. In 1918, thanks to the comparative mildness of the influenza epidemic, there is no peak at all in the death-rate line; the peak occurs in 1919 and the death-rate remains high above the birth-rate in 1920. Orissa suffered less from the influenza but more acutely from the agricultural distress that followed the failure of the rains in 1918 and the death-rate therefore remained high when it was already falling rapidly elsewhere. The troubles of Orissa were prolonged partly owing to its dependence on the single rice crop which offered chances of recovery at rarer intervals and partly because, when those chances did occur, floods interfered to prevent the crop being a success. So was justified the theory that the measure of the agricultural prosperity of any area is obtained by adding the percentages of the cropped area under *bhadai* and *rabi*, and deducting that under *aghani*. The following table shows for each Natural Division the percentage of the net cropped area under each of the three crops and an index number calculated in the manner suggested:—

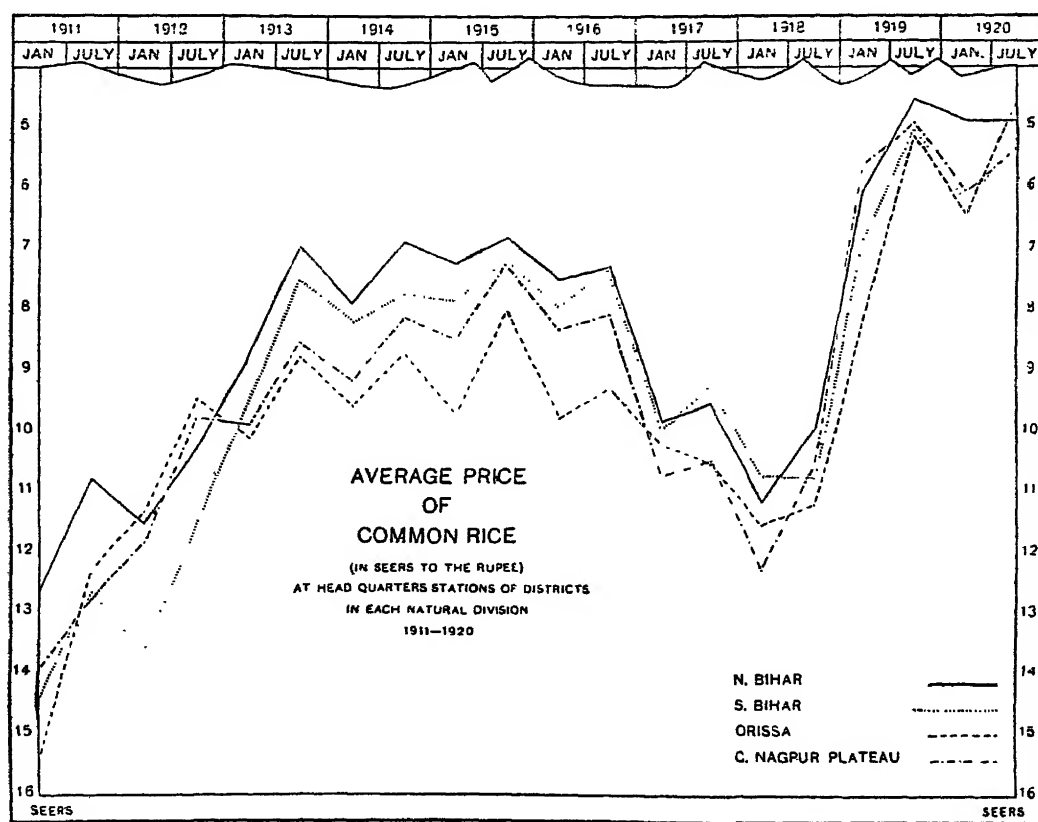
NATURAL DIVISION.	Percentage of net cropped area under			Index No.
	<i>Rabi.</i>	<i>Bhadai.</i>	<i>Aghani.</i>	
North Bihar	53·8	40·3	46·9	47·2
South Bihar	70·8	14·6	41·3	44·1
Orissa	10·1	15·6	81·3	-55·6
Chota Nagpur Plateau (excluding the States).	14·0	50·4	41·9	12·5

In Bihar the *rabi* is important and in Chota Nagpur the *bhadai*. But a considerable area (especially in Bihar) is shown as twice cropped in which catch-crops, usually *khesari*, are sown broad-cast amongst the *bhadai* on land unsuited to the finer and more valuable *rabi* crops. The figures therefore tend to exaggerate the relative immunity from agricultural distress of Bihar. But the outstanding feature is that Orissa is far more dependent on a single crop and therefore far more exposed to agricultural distress than the other divisions, which fact has been fully corroborated by the events of the last few years.

22. It has been stated above that rice is the most important single article of consumption in the province and a diagram is therefore reproduced below which shows the average retail price of common rice in seers to the rupee at the headquarters stations of the districts in each Natural Division during each of the

RISE IN PRICE OF RICE.

last ten years : no account is taken in this diagram of the states, but it may be assumed that the general trend of prices there was similar though the level was lower.



It will be noticed that the four lines follow one another fairly closely though North and South Bihar tend to go wide in 1911-12: the Orissa line is usually at the bottom of the group and the North Bihar line at the top, showing that rice has usually been cheapest in Orissa and dearest in North Bihar. For the first half of the decade there is a general upward trend of the lines in the diagram indicating that prices were steadily rising. This general tendency had been apparent for the last twenty years but the rise of prices from 1911 to 1915 was steeper than the line of the general rise, for 1911 was the third of three years of good crops and prices in 1910 and 1911 were lower than they had been since 1905. In 1916 the upward trend of the lines is arrested and for the next two years, 1917 and 1918, there is a marked fall, the 12 seers line being reached for the last time in Chota Nagpur in January 1918. The war was at this time reaching its crisis and the difficulty of transport in India had become acute as only about 20 per cent. of the rolling stock was available for ordinary public traffic: while therefore imported articles were very expensive and difficult to obtain, articles produced in the province were held up and could not be exported to their natural markets with the result that their prices fell. "The lack of railway facilities", says the General Administration Report for the year 1917-1918, "rendered difficult the marketing of agricultural produce, the price of which, except for wheat, ruled considerably lower than in the previous years. Cultivators were in consequence short of cash for the payment of rent and for other necessary expenditure". This state of affairs continued till the monsoon failed in September 1918: the outlook then suddenly changed and the problem became no longer one of how to export but of how to maintain the stocks in hand. Retail prices instantly responded and soared upwards: in January 1919, the lowest price shown is 8 seers to the rupee in Orissa, in Bihar it is about 6 seers. In July 1919, the lines of all four divisions are clustered in the neighbourhood of the 5 seer line and they are there again in July 1920: the highest point actually reached was in September 1919, when for three weeks the average price was below 5 seers. An interesting comparison has been made by the Director of Civil Supplies between the prices that obtained on the

present occasion and at the time of the two previous famines, and the manner in which the people reacted to them. In 1873-74 famine was declared in fourteen districts in this province, *viz.*, all the districts of the Patna, Tirhut and Bhagalpur Divisions and three districts in Chota Nagpur; relief works started in January 1874 and lasted till August, and at one time a million and a half workers were employed daily upon them. In 1896-97 famine affected eleven districts throughout the province, relief works started in November 1896 and lasted till September 1897. In 1919 test works were started in eight districts but they did not attract workers and relief works were opened in only three districts, in limited areas of Bhagalpur and the Santal Parganas from August to November and in Angul from May to October. The maximum number of persons on these works on any one day was under 3,000. On the other hand gratuitous relief was extended to 74,000 persons in 1919 on a much larger scale than usual, but this was necessitated by the fact that the influenza epidemic of 1918 had carried off the bread-winners of many families and left their dependants without means of support. It is however quite clear that the people were much more self-reliant and better able to take care of themselves than they had been on either of the two previous occasions. In face of this fact it is interesting to compare the average prices of common rice on these three occasions for the period of October to September in five of the most affected districts (in seers to the rupee):—

YEAR.	SHAHABAD.		MUZAFFARPUR.		BHAGALPUR.		HAZARIBAGH.		PURL.	
	Srs.	Ch.	Srs.	Ch.	Srs.	Ch.	Srs.	Ch.	Srs.	Ch.
1873-74 	12	0	13	10	12	13	13	5	.....
1896-97 	8	9	8	1	9	11	7	12	11	14
1918-19 	5	9	4	8	5	2	5	6	6	5

To go even further back into the past it is recorded that when in the course of the great famine in Orissa in 1866, the price rose to $3\frac{1}{2}$ seers to the rupee in Bhadrakh bazaar, it meant that nobody could pay for it and the shops were accordingly shut. The Collector of Balasore describes how in those circumstances the roads were crowded with dead and dying and he estimates that one-fifth of the population of the district perished, of whom 17,000 died of starvation. In 1919, the price of rice actually touched $3\frac{1}{2}$ seers to the rupee in Muzaffarpur district without these disastrous consequences: the death-rate for the year in that district was only 32.5 per mille and no one died of starvation. It is clear that a great change has occurred: there is much more money about than there was formerly, but it has lost much of its purchasing power, and this fact must not be lost sight of when judging the well-being of the people from a diagram illustrating the rise of prices.

23. The increase in the price of rice is paralleled in the price of other food-grains also. Except in Orissa, maize is perhaps the next most important food-grain after rice. The average price of maize

RISE IN PRICE OF OTHER ARTICLES.

in January 1911, calculated in the same way as the average price of rice has been calculated, was over 20 seers to the rupee throughout Bihar and Chota Nagpur. By January 1914, the average price had risen steadily to a little over 12 seers; by January 1915, it was under 12 seers; in the other words the price had doubled since 1911. For the next three years prices fell, though 20 seers were never again to be had for a rupee. After the failure of the rains in 1918 the price rose sharply again to something over 8 seers in January 1919, and to about 6 seers in July of that year: that was the highest point and from then the prices fell slightly till the end of the decade. The same thing occurred with *marua*, a grain which is eaten by the poorer classes. The lowest price, well over 20 seers to the rupee, was recorded at the beginning of the decade. By 1915 the price had doubled; in

July 1915 just over 12 seers could be had to the rupee in North Bihar and just under 12 seers in Orissa. Then followed three years of rather lower prices, but in July 1919 the price in North Bihar rose to $5\frac{1}{2}$ seers to the rupee and in the Chota Nagpur Plateau to $6\frac{3}{4}$ seers, that is to say approximately four times the prices that had obtained in July 1911. So also with wheat; the price of 1915 was nearly and that of 1919 more than double that of 1911.

The same upward tendency is marked also with those necessities of life other than food-grains which are for the most part imported and the supply of which was therefore more directly affected by the war. In this case however there is the difference that the restriction of transport caused not a downward but a further upward tendency. The price of salt tended to rise during the first few years of the decade but to no marked extent. In 1914, 20 seers of salt could be had for a rupee in several districts. When the war began and the import of Liverpool salt which it had been the practice to send out to India as ballast was restricted, India was thrown back on her own resources and a period of gambling ensued amongst the dealers at the up-country sources: as the result of this combination of circumstances the price of salt was more than doubled for the consumer by January 1918; except in Orissa, where prices were rather lower, a rupee would purchase only about 8 seers. Steps were taken by Government to regulate the distribution and the price fell from that point, but in January 1920 it was still nearly double what it had been in January 1911. Owing chiefly to the impossibility of getting ships to bring it to India there was also an acute shortage of kerosene oil which is now an article of almost universal use and the price of all brands rose till people began to revert to burning vegetable oils for lighting purposes. The oil companies control the prices at which their agents sell in the mufassal, but the demand was so very greatly in excess of the supply that there was ample scope for profiteering between the point at which the oil left the agent's hands and that at which it reached the ultimate consumer. According to prices quoted in the Gazette the price of ordinary brands rose from under Rs. 2 to over Rs. 3 a tin but it is probable that in the bazars the oil was being retailed in small quantities at prices far in excess of these rates.

24. But perhaps the greatest hardship was experienced in connexion with the price of cotton cloth. How great the hardship was may be gathered from the fact that one of the planks in the platform of the Tana Bhagat reformers in Ranchi district,

COST OF CLOTH.

a subject which will be discussed at greater length in Chapter IV, was that Marwaris who sold dear cloth should be burned. The rise in the price of *dhotis* and *saris* may be taken by way of illustration. The *dhotis* used by men in this province generally measure $4\frac{1}{2}$ or 5 yards in length and 44 inches in width and the *saris* worn by women are anything from 5 to 7 yards in length: in the aboriginal tracts the *dhotis* are shorter and $3\frac{1}{2}$ yards is a usual length for a *dhoti* woven locally on a hand-loom. In 1911 a pair of ordinary *dhotis* could be had for Rs. 1-10-0 or Rs. 1-12-0 and As. 14 was an ordinary price for an aboriginal to pay. These prices continued with little variation till 1915; by January 1916 the price had risen very markedly and was nearly double the price of 1911. It continued to rise throughout 1916 and 1917; in January 1918 the price of an ordinary pair of *dhotis* ranged from Rs. 4-12-0 to Rs. 7, the average price being Rs. 5-8-0 or Rs. 6. In the autumn of 1918 the price was still rising and the armistice, although it brought the wholesale prices tumbling down by 50 per cent., produced little or no effect on the retail prices at which cloth was selling in the mufassal. At this point the local Government took action and purchased in all sixteen million yards of cloth which they subsequently sold to the public at controlled prices. This had not time to take effect by January 1919, when prices were generally higher than they had been in January 1918, but it had the effect of checking local profiteering in 1919 and there was a distinct decline in prices by January 1920 when a pair of *dhotis* was to be had at prices varying from under Rs. 4 to something over Rs. 6. Latterly many people have been wearing shorter and narrower *dhotis*; 10 yards were reduced to 9 and 9 to 8, and 44 inches became 39. There has also been a change of fashion in the cloth worn: old imported favourites like Messrs. Graham's No. 5563 and Messrs. Ralli's Lattu mark have been displaced to a marked degree in the public favour by cloth manufactured at Bombay and Nagpur. The motives that have led to this change of fashion

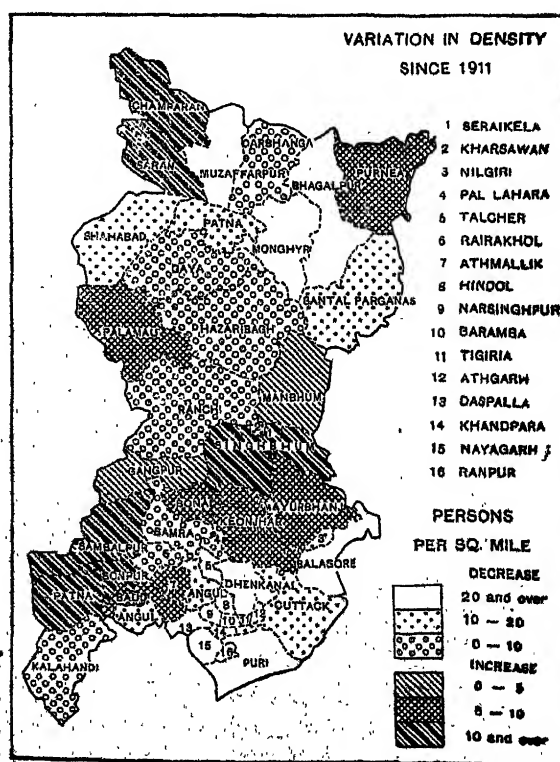
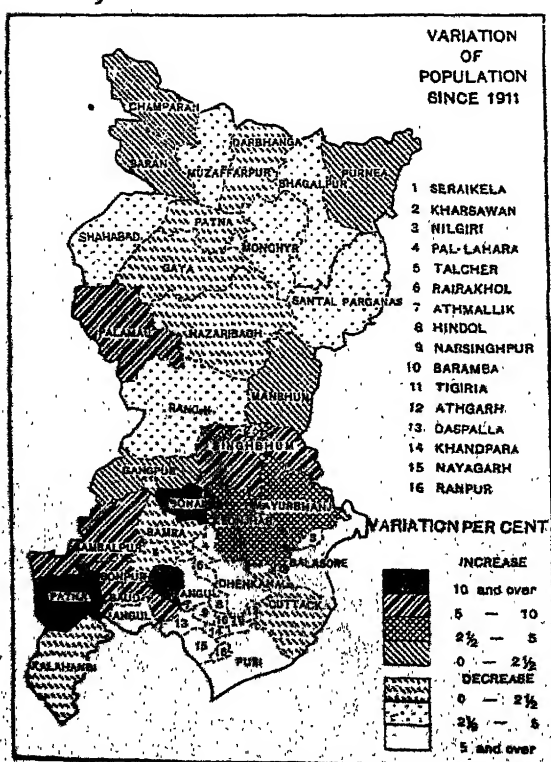
are only partly economic, but speaking generally it may be said that men and women were paying three times as much for their *dhotis* and *saris* in 1920 as they were in 1911.

25. The foregoing paragraphs will have made it clear that the cost of every thing that the ordinary villager has to buy had increased enormously since the last census. Prices generally had doubled by the end of the period, and though it is undoubtedly true that the amount of money in circulation had also increased so that people had more money to spend than ever before, and though it is also true that cultivators who had surplus stocks to dispose of were benefited rather than otherwise by the rise of prices, yet such a violent re-adjustment could not be effected without much hardship to certain sections of the population which was bound to be reflected in their general health and fertility.

26. The map which forms the frontispiece of this report shows the density and the following maps show the variation of population and the increase or

VARIATION IN DENSITY.

decrease of density in the different districts in the province. The growth of population is not deliberately checked on prudential grounds, unless the inadequate care of female infants in certain cases is regarded as prudential: it is checked only by what Malthus described as "positive" checks, "all unwholesome occupations, severe labour and exposure to the seasons, extreme poverty, bad nursing of children, great towns, excesses of all kinds, the whole train of common diseases and epidemics, wars, plague and famine". These checks, as has been shown have been particularly active during the latter half of the decade. In 1918 over half a million persons died of influenza and the failure of the rains in that year not only affected the fecundity of the population but also drove many thousands of persons to emigrate who would otherwise have stayed at home and become the parents of children. The birth-rate fell from 40·4 per mille in 1917 to 37·5 in 1918 and 30·4 per mille in 1919. The result has been, as will be seen later, a marked falling off in the proportion of infants in the population, a scar that will remain in that generation until it passes out of the age tables. The end of the decade still finds a great increase of emigration in the centre and south of the province but a decrease in the north, so that the maps below tend to understate the real variations towards the north of the province and to overstate them towards the south. Each district of the province will now be considered in turn and the actual effect of the recent course of events will be traced upon the growth or decline of the population.



NORTH BIHAR.

27. The population of Saran grew steadily till 1891, though part of the increase must be ascribed to an improving standard of enumeration. From 1891 a decline set in, which continued for the next twenty years. Plague first occurred in

SARAN.	Population 1921.	PERCENTAGE OF VARIATION.	
		1911—1921.	1901—1911.
DISTRICT TOTAL	2,339,953	+2·21	- 4·97
Sadr Subdivision	914,028	+2·21	- 6·64
Chapra	342,948	+8·15	- 5·84
Manjhi	198,029	+5·60	- 12·57
Parsa	214,239	+0·54	- 4·56
Mashrak	134,892	+0·94	- 6·00
Sonpur	93,920	+0·11	- 6·79
Siwan Subdivision	775,536	+2·27	- 7·22
Basantpur	262,252	+1·85	- 6·23
Siwan	327,350	+3·18	+ 6·25
Darauli	215,934	+1·43	- 9·65
Gopalganj Subdivision ...	650,389	+2·13	+ 0·46
Mirganj	380,617	+2·68	+ 3·55
Gopalganj	269,772	+1·43	- 3·54

decade a further loss occurred. There was a general increase in mortality, plague accounting for no less than 166,000 deaths; there was also virulent fever in four years out of the ten and the District Officer was forced to the conclusion that the district had become less healthy than it used to be. There was at the same time a further increase in emigration and a decrease in immigration, so that the decrease in the actual population of 4·97 per cent. recorded at the census tended to exaggerate the true facts of the case. A very slight increase occurred in the Gopalganj subdivision; in the Sadr and Siwan subdivisions there was a substantial decrease.

28. The year 1911 was a year of good crops but bad health, the mortality from plague and fever being heavy and cholera also taking its toll. The total number of recorded deaths amounted to over 100,000, a figure that was not reached again till 1918, the year of the influenza epidemic. In 1912 the rains failed in September and October and in the following year there were floods in August, but the public health was fairly good and the death-rate decreased, while the birth-rate ruled high throughout. In 1914 occurred the last bad outbreak of plague, the mortality from this cause (over 20,000) being twice as great as it was in any subsequent year; nevertheless the mortality from causes other than plague was lower than usual and the death-rate did not rise. The following two years were healthy, though in 1916 the birth-rate, like that of every other district in the province, showed a marked decline; but in 1917, which was a year of heavy rains and floods, there were outbreaks of cholera, fever and plague, which raised the death-rate again, the birth-rate rising also. The following year was disastrous from the point of view of public health; the year opened with a violent outbreak of cholera which caused 14,000 deaths and the number of plague deaths again rose to over 10,000; then came the influenza epidemic which raised the mortality from fever to 69,000, the total number of deaths in the year being 142,000 or 43,000 in excess of the number of births. Meanwhile the rains failed and the prices of local produce rose: the prices of imported articles had already risen, and the population passed through a period of acute distress. In the following year therefore, although the number of deaths showed a great decrease with the cessation of the influenza epidemic, the birth-rate fell to its lowest point, 33·3 per mille. The last year of the decade was a year of increasing birth-rate and decreasing death-rate, but poor rains and poor crops militated against a rapid recovery.

29. During the last twenty years when the population of the province was steadily increasing, the population of Saran was progressively decreasing;

SARAN.	1921.		1911.	
	Males	Females.	Males.	Females.
Actual population	1,182,355	1,207,598	1,064,272	1,225,158
Immigrants	12,728	32,018	12,299	34,635
Emigrants	147,854	62,036	203,876	80,325
Natural population	1,267,456	1,237,621	1,255,849	1,270,848

yet, now that the population of the province has received a set-back, the population of Saran shows an increase of 50,523. This increase is distributed equally over the three subdivisions; it has occurred in every thana in the district and is most marked in Manjhi which

was the greatest loser at the last census. As compared with its own past history for the ten years 1901—11 and to that of the other districts of the Tirhut Division since 1911, Saran has enjoyed a period of comparatively good health. Whereas in the previous decade the total number of deaths recorded in the district exceeded the total number of recorded births by 9,000, in the period 1911—21 the births (994,000) were in excess of the deaths (895,000) by 99,000. A circumstance that has contributed greatly to this result is the fact that the outbreaks of plague in this district are losing their virulence; the total mortality from this cause since 1911 was 105,000 which is 11,000 less than in the previous ten years, and the average annual number of plague deaths fell from 15,000 in the first half to 6,000 in the second half of the decade. The deaths from cholera and fever have also been fewer in this district than in any other district in the Tirhut Division. It is also noteworthy that the net district gain of 50,523 is due entirely to the increase among the male sex, the female sex having suffered a loss of 17,560. The real reason of the increase of population in the district is explained by the marginal statement. While the number of immigrants has remained constant, there has been a decrease in the emigrants by 74,311, the number of male emigrants having decreased by 56,022 and that of female emigrants by 18,289. This decline of emigration more than accounts for the increase in the actual male population. It may be added that the increase has occurred largely amongst the males of the labouring castes (Dosadhs, Chamars, Nuniyas and Kumhars) from which emigrants are drawn in large numbers. The increase of population does not mean therefore that the pressure on the soil is increasing. The results of the censuses seem to show that the number which the soil can bear in present conditions was reached some years ago. It is commonly supposed however that in spite of this pressure on the soil, the people of Saran are better off than their neighbours. The clue to this is probably to be found in two factors: the chief source of wealth of the Saran cultivator is his sugarcane and vegetables and, though the net cultivated area in Saran is less than in any other district in the Tirhut Division, the area under sugarcane is more than twice and the area under "fruits and vegetables including root crops" nearly twice as great as in any other of these districts. Secondly the number of emigrants from and, as a result, the remittances by money order to Saran are higher than in any of the other Tirhut districts. Some interesting information is available from the report of the Settlement Officer on the revisional settlement proceedings. The cultivated area has increased by 14,000 acres since the previous settlement, the increase being noticeable in Mirganj and Siwan: 82.55 per cent. of the district is now cultivated. There has been a great increase in the number of settled and occupancy raiyats and the fields and holdings have diminished in size. The result of this increasing pressure on the soil is that "the craze for extending cultivation is so great that extension has mostly been achieved at the expense of the pasture lands. The area reserved for grazing has accordingly decreased. The cattle have to be maintained in a precarious manner by means of dry stalks of maize and other *rabi* crops for the greater portion of the year. After the crops have been taken off the ground they are frequently let on to it and they live on the stubble as best they can. The inevitable result is that the breed of cattle has deteriorated and this is a source of peril to combat which special means will have to be devised."

30. Between 1872 and 1891 the population of Champaran, thanks chiefly to immigration and better enumeration, increased by 29 per cent., but in the following decade owing to unhealthiness, to the diminished fertility of the people resulting from a series of lean years which culminated in a famine in 1897 and to the stoppage of immigration, there was a decrease of 3·7 per cent., the greater part of which occurred in the Sadr subdivision. By 1900 prosperity was restored and the following years were years of high birth-rates and low death-rates, and in spite of the fact that the current of immigration continued to flow less strongly, by the census of 1911 there was an increase of 6·59 per cent., which was shared by all thanas in the district except Madhuban, where there was a slight loss in the male population.

31. In the decade now under review, the year 1911 was a healthy year and one of good crops. In 1912 the rains failed in September and October, with the result that the *bhadai* and *aqhani* crops were damaged but the public health continued fair. The next year was one of excessive rain accompanied by a violent outbreak of cholera in the north of the district. In 1915 floods occurred in August which caused little loss of human life but which damaged the *bhadai* crop, swept away a considerable number of cattle and caused a large number of houses near the

CHAMPARAN.	Population. 1921	PERCENTAGE OF VARIATION.	
		1911—1921	1901—1911.
DISTRICT TOTAL	1,940,841	+ 1·70	+ 6·59
Sadr Subdivision	1,123,614	+ 2·01	+ 5·85
Motihari	188,658	+ 2·93	+ 6·73
Adapur	185,039	+ 4·22	+ 4·69
Dhaka (Ramchandra)	299,060	+ 4·24	+10·82
Kesariya	179,645	- 3·06	+ 4·18
Madhuban	103,432	- 0·47	- 0·55
Gobindganj	167,760	+ 2·00	+ 4·18
Bettiah Subdivision	817,227	+ 1·28	+ 7·60
Bettiah	371,827	+ 3·02	+ 5·83
Bagaha	215,027	+ 3·15	+ 5·93
Shikarpur	230,373	- 3·00	+12·50

rivers to collapse. In the same year there was an outbreak of cholera which was specially severe in Motihari town. There was excessive rain again in 1916 accompanied by floods in the Sadr subdivision and an outbreak of cholera, but on the whole the year was a healthy one. In 1917 the rain was still rather above the normal and there was very heavy mortality from cholera, the death-rate in Kesariya thana (27·9 per mille) being the highest recorded in any rural area in Bihar and Orissa that year. The number of deaths was 20,000 higher than it had been in the previous year, but as the birth-rate also rose the survival rate remained about the same. Cholera was again destructive in 1918, and on the top of this outbreak came the influenza epidemic and the failure of the rains. The influenza caused the greatest havoc in the Bagaha thana where over a thousand deaths occurred before the end of the year; it proved specially deadly to the Tharus who live along the foot of the hills in the north of this thana. Other thanas badly affected were Kesariya, Motihari and Adapur. By the end of the year 97,000 persons or 57·2 per mille had perished in the district from all causes, the number of recorded births being 78,000 only. The inevitable result of this distress was a marked fall in the birth-rate to 34·0 per mille in 1919, but on the whole the public health of Champaran was better than that of the other districts of the Tirhut Division in these two years; the district death-rate in 1918 was lower and the district birth-rate was higher than in Saran, Muzaffarpur or Darbhanga. The rains continued deficient in 1919 and 1920 and the district had not fully recovered itself by the year of the census. The total number of births recorded in the decade was 773,000 or 125,000 in excess of the reported deaths.

32. The increase in the population which has fallen to the rate of only 1·7 per cent. for the district was shared by both subdivisions, the greater share falling to Sadr. In this subdivision the increase occurred in four out of the six thanas. The Dhaka thana which is the most densely populated in the district again shows the highest rate of increase; the soil here is exceedingly fertile and the crops are protected against the vagaries of the rainfall by a small but valuable system of canals. Of the two thanas which show a decrease, Madhuban was twenty years ago the most densely populated in

the district but since then it has fallen away at each census: Kesariya, which shows the heaviest decrease in the district, has suffered more severely than other thanas from visitations of cholera and influenza. In the Bettiah subdivision the increase is greatest in Bagaha, in spite of the havoc wrought there by the influenza epidemic and the fact that malaria is endemic throughout the north of the thana. This may be ascribed to the increase in the area irrigated from the Tribeni canal from twenty to ninety-two thousand acres since 1911. On the other hand the Shikarpur thana, which is also benefited by the canal and where the influenza did not claim so many victims, shows a decrease of 3.0 per cent. There is no doubt that the number of deaths from influenza in Shikarpur thana was much greater than was reported; fever also is endemic here and militates against the increase of the population. It is noteworthy that in the last five years of the decade the number of reported deaths exceeded the number of reported births in this thana by over 9,000. Finally it must be remembered that at the last census Shikarpur showed a remarkable increase of no less than 12.80 per cent. as against only 5.93 in Bagaha: it is possible that the present census marks a more even distribution of the population between the newly irrigated areas in the two thanas.

33. The figures for migration are given in the marginal table. There has been a marked decline in the number of immigrants of both sexes,

CHAMPARAN.	1921.		1911.	
	Males.	Females.	Males.	Females.
Actual population	968,478	972,363	942,012	966,373
Immigrants	30,242	40,170	42,012	53,506
Emigrants	25,101	21,861	29,409	18,423
Natural population	968,337	953,554	929,409	931,290

a tendency that can be traced for the last thirty years. In 1891 the number of male immigrants was 140,992 and of females 107,519; ten years later the figures were approximately half of these; in 1911 the male figures had decreased further, while the female

figure remained about constant, suggesting that the immigrants' wives were moving in after them. On the present occasion, though the number of female immigrants is still in excess, there has been a decrease in both sexes. The immigrants invariably exceed the emigrants in the case of Champaran: the stream of emigrants is here of minor importance and its volume is much what it was ten years ago. Champaran is still the most sparsely populated district in Tirhut. It contains half a million more people than it did in 1872, but there is still room for further expansion particularly in the north-west of the district. Here there is a tract of uncultivable hills and at their foot a considerable area of grass land which is at present used only for the pasturage of large herds of cattle. Some of the richest soil in the district is in these thanas and with the construction of the Tribeni canal there is no doubt that cultivation will extend. This area is however at present so unhealthy that it is unsuited to supporting a large population; it is possible that with the advance of cultivation the zone in which malaria is endemic may contract or the disease may become less deadly, but at present there is little immediate prospect of any rapid development. But the possibilities of expansion of cultivation and with it of increased population are not confined to the Bettiah subdivision. The revisional settlement proceedings have shown that in the last twenty-five years there has actually been a contraction of the cultivated area in the Sadr subdivision, especially in the Motihari, Kesariya and Gobindganj thanas. The Settlement Officer considers that the arrested development in these three thanas must be due to something more than climate and ill-health and suggests that it may be attributable to some extent to the comparative lightness of the soil and the opening up of the more fertile northern areas. It is possible also that the agrarian unrest of the last few years has checked immigration into the district. But although there has been no extension of cultivation, the statistics show that the average incidence of rent in Champaran is much less than it is in Muzaffarpur and Darbhanga and less than half what it is in Saran. They also show that there has been a tendency for land to pass from the possession of landlords into the holdings of the raiyats, while its money value has about doubled. Trade has developed greatly: the proportion of land under the more valuable crops, rice and

sugar, has increased, and so also, thanks to the extension of irrigation, have the average outturn and the twice cropped area. Everything points to the fact that the Champaran cultivator is making more of his land than he used to and suggests that a further steady increase of population is to be looked for which is likely to be most marked in, but by no means confined to, the north-west of the district.

34. Until the present census the population of Muzaffarpur district had shown a steady increase; the rate for the intercensal periods fell from 15 per cent. to 5 per cent. and then again to 1·5 in the decade 1891—1901. The first rush of increase

MUZAFFARPUR.

was no doubt due in part, as in the case of the neighbouring districts, to faulty enumeration in 1872 and this rate received a check in the second decade when the continued increase in the north of the district was discounted by a decline in the population of the Hajipur subdivision in the south. Between 1891 and 1901 the district suffered from famine, floods and epidemics of cholera which further reduced the rate of increase and it was again the increase of population in the north, due chiefly to immigration, which saved the district from a decrease on the whole. Meanwhile the pendulum had swung back and the first half of the following decade (1901—1911) was a period of prosperity and high birth-rates, but in the last half of the decade the people suffered from failure of the crops. When the census was taken in 1911, the Sitamarhi subdivision in the north of the district again showed a substantial increase (+6·81 per cent.), the Sadr subdivision in the centre showed a slight increase (+2·86 per cent.), just balancing the slight decrease of the previous decade, and the Hajipur subdivision which had suffered specially from plague once more showed a decrease (−1·10 per cent.). The rate of increase for the district as a whole was 3·24 per cent. in the decade.

35. The last year of that decade was a year of floods and cholera and the death-rate was in excess of the birth-rate. Deaths were again in excess in 1911 owing chiefly to another violent outbreak of cholera, the areas specially affected being the Lalganj, Paru and Mahuwa thanas. In the early months of the following year the death-rate rose still further, the south of the district having apparently become infected from an outbreak of cholera in the Madhubani subdivision of Darbhanga. Plague also claimed a considerable number of victims in the same area. The birth-rate in this year was however exceptionally high (44·47 per mille) and, though it fell steadily for the next few years, it remained in excess of the death-rate till 1916, which was a very unhealthy year. Cholera and fever again claimed a large number of victims, the area specially affected this time being the Sitamarhi and Pupri thanas in the north of the district, and as the result of this unhealthiness the birth-rate

MUZAFFARPUR.	Population, 1921.	PERCENTAGE OF VARIATION.	
		1911—1921.	1901—1911.
DISTRICT TOTAL ...	2,754,845	− 3·18	+ 3·24
Sitamarhi Subdivision ...	1,051,897	− 0·17	+ 6·81
Sitamarhi	368,703	− 0·29	+ 6·68
Sheohar	207,063	− 2·50	+ 8·88
Belsand	216,182	+ 0·85	+ 7·57
Pupri	259,944	+ 1·06	+ 5·18
Sadr Subdivision ...	1,047,046	− 3·18	+ 2·86
Paru	295,070	− 6·86	+ 5·02
Muzaffarpur	528,118	− 3·87	+ 0·97
Katra	225,858	+ 3·85	+ 4·68
Hajipur Subdivision ...	656,002	− 7·64	− 1·10
Mahuwa	275,272	− 5·11	+ 1·86
Lalganj	137,641	− 10·67	+ 0·60
Hajipur	243,089	− 5·29	− 5·27

fell to below 40 per mille for the first time in the decade. The year 1917 was again a year of prolonged and excessive rains resulting in another outbreak of cholera and fever which was specially severe in Paru thana. In 1918 the most violent outbreak of this decade began in March and lasted till August. This outbreak resulted in over 32,000 deaths during the year, the greatest havoc being wrought in the south of the district in Lalganj and Hajipur. No sooner had the cholera shown signs of subsiding than the influenza epidemic supervened with disastrous results.

The total number of recorded deaths from fever in the year was 120,000 and the annual death-rate in the district was 60·87 per mille or 17·42 per mille in excess of the birth-rate. The distress was of course aggravated by the failure of the crops and the general high level of prices. The influenza epidemic did not subside till March 1919 and caused a considerable number of deaths in that year also; the birth-rate also was at its lowest in 1919 and the deaths exceeded the births by 16,000. The rain and the crops were again short this year and in 1920, so that the process of recovery from the troubles of 1918 was retarded. In the course of these ten years 1,129,000 births and 1,046,000 deaths were recorded in the district, and of the deaths 134,000 were due to cholera, 744,000 to fever, and 26,000 to plague. The figures are reflected in the table on the last page. It will be seen that in accordance with precedent the loss has been heaviest in the Hajipur subdivision (—7·64 per cent.), and least in the Sitamarhi subdivision (—0·17 per cent.), while the Sadr subdivision as usual represents the mean (—3·18 per cent.). The causes which have operated to produce these differences have been the same as in previous decades: cholera and plague have been specially active in the south of the district which lies within the area in which plague is endemic and emigration also has been taking place on a large scale from this area since the crop failure of 1918. The greatest decrease (—10·67 per cent.) has occurred in Lalganj thana which has been subjected to almost yearly attacks of cholera and plague, the other two thanas of the Hajipur subdivision and the Paru thana of the Sadr subdivision, where cholera outbreaks are frequent, also being heavy losers. The only gainers are the Katra thana in the Sadr subdivision which escaped lightly from the influenza epidemic and the Belsand and Pupri thanas in Sitamarhi which are less liable to epidemics and where the rainfall and the crops have been more consistent than in the south. The expansion of population in the north has also an economic basis in the fact that rents there are, or at any rate at the time of the settlement were, lighter and holdings larger than in the south. Whether it is a good thing that the centre of population should be shifting to the north as it is steadily doing is open to doubt; for it means that a greater proportion of the population is to be found in the area which depends entirely on the single rice crop and is therefore more liable to famine. Although the subdivisions stand in their usual order of variation, the gain of the last decade has turned into a loss on the present occasion, and the population stands now almost exactly where it stood in 1901. This is primarily due to the series of epidemics from which the district has suffered, the natural reported increase being distinctly less than that of any

Excess of reported births over reported deaths, 1911—1921.		
Saran ...	...	99,000
Champanan ...	...	125,000
Muzaffarpur ...	...	83,000
Darbhanga ...	...	105,000

other district of the division, as the marginal figures show. The loss of female population is markedly greater than the loss of males, a fact corroborated by the experimental census already mentioned. Muzaffarpur like Saran is one of the districts from which every year a large body of temporary emigrants set out at the beginning of the cold weather and return in the hot weather in time to harvest the *rabi* crop and to be ready for the bursting of the monsoon. As compared with 1911 there has been a decrease, both in immigration and emigration, common to both sexes. Of the two the decrease in emigration is the greater, so that the actual population has been less reduced by migration than usual: migration therefore is not the explanation of the loss of population in the last decade which is to be ascribed rather to the prevalence of epidemics. On the other hand migration is to a certain extent the explanation of the differences in the variations of population between the three similar districts of Muzaffarpur, Saran and Darbhanga which send out a large number of emigrants every year. In Saran where there was an increase in the actual population of 50,523 there was

a decrease in the number of emigrants by 74,311; in Darbhanga, as will be seen,

MUZAFFARPUR.	1921		1911.	
	Males.	Females.	Males.	Females
Actual population	1,324,931	1,429,954	1,360,200	1,485,314
Immigrants	18,454	46,848	24,059	49,197
Emigrants	101,909	60,716	113,753	51,061
Natural population	1,405,666	1,448,522	1,449,904	1,617,173

there was a slight decrease in the actual population of 16,152 and a decrease in the number of emigrants by 49,256: in Muzaffarpur on the other hand where the loss in actual population was heaviest (90,569) the decrease in the number of emigrants was least (32,099).

The loss of actual population therefore has varied inversely with the decrease of emigration.

36. Darbhanga district resembles Muzaffarpur in consisting of a rice-growing tract which is liable to severe floods in the north and a fertile and densely populated tract of upland in the south where rich and varied *rabi* crops are grown. The

history of the growth of the population is also very similar to that of Muzaffarpur, losses in the south being made good by gains in the north. It has already been mentioned that the increase of 23 per cent. shown in Darbhanga district in the period 1872—1881 must be largely discounted owing to the inaccuracy of the first census. By 1891 there had been a further marked increase of population in the Madhubani subdivision in the north, slightly discounted by a decrease in the Samastipur subdivision in the south. In the following decade there were several years of short crops and in 1897 there was a famine which affected the whole district except the Samastipur subdivision. Towards the end of the decade there were floods accompanied by heavy mortality: the result was a decline in the rate of increase, which was nevertheless general and, strange as it may appear, most marked where the famine had been most acutely felt. As in the case of Muzaffarpur, the first half of the decade 1901—1911 was a period of prosperity with high birth-rates and low death-rates. Badly distributed rain in 1906 led first to floods and then to famine; famine was again declared in 1908, and it was not till 1910 that normal conditions were restored. In spite however of this distress, the net excess of births over deaths for the ten years was 190,000 and the slowness in the increase of the population (+0.59 per cent.), was owing to the large number of persons who had emigrated from the district at the time of the census of 1911.

37. The year 1911 was a year of good crops and fairly healthy also, being conspicuous for the high birth-rate recorded (44.87 per mille). In the following two years there were cholera epidemics which caused great loss of

DARBHANGA.	Population, 1921.	PERCENTAGE OF VARIATION.	
		1911—1921.	1901—1911.
DISTRICT TOTAL	2,913,529	- 0.55	+ 0.59
Madhubani Subdivision ...	1,168,430	+ 2.70	+ 3.78
Benipatti	266,503	+ 0.63	+ 3.27
Khajauli	278,239	+ 2.53	+ 9.72
Madhubani	297,493	+ 5.23	+ 2.72
Phulparas	328,890	+ 2.31	- 3.17
Sadr Subdivision	801,960	- 0.17	+ 1.63
Darbhanga	447,774	- 1.77	+ 4.68
Bahera	354,188	+ 1.92	- 2.11
Samastipur Subdivision ...	945,139	- 4.58	- 3.62
Samastipur	230,461	- 7.56	- 2.54
Roserha	223,131	+ 2.98	- 5.32
Warisnagar	164,037	- 1.32	- 1.67
Dalsingh Sarai	232,510	-10.72	- 4.85

life, that of 1912 in Roserha thana and that of 1913 in the Madhubani subdivision. 1914 was a year of badly distributed rainfall and indifferent crops, but satisfactory from the point of view of public health: the number of births fell by 6,000 as compared with 1913, but the number of deaths fell by 10,000. In 1915 floods occurred which led to outbreaks of cholera and malaria and also to a rise in prices by damaging the *bhadai* crop. In 1916 the rain was deficient for some months, but it then fell

in excess and caused floods in all three subdivisions which damaged the crops

and caused temporary distress: the birth-rate fell to 34·5 from 40·0 per mille in 1915 and the death-rate showed a slight rise. Samastipur suffered from a cholera epidemic in 1917, but otherwise that year was fairly healthy. In March 1918 cholera broke out and continued in epidemic form till August, causing no less than 57,000 deaths. But worse was to come in the shape of the influenza epidemic which raised the number of deaths from "fever" this year to 109,000. The total number of deaths in the year was 188,000 or 64·2 per mille, 85,000 in excess in the number of births. The distress occasioned by the epidemics and the crop failure of 1918 and also in part by the high prices of all necessities of life led to the birth-rate of 1919 dropping to 30·1 per mille. The rainfall was short this year and again in 1920 which damaged the winter rice crop on both occasions. The total number of births during the decade was 1,121,000 and the total number of deaths 1,016,000, the natural increase therefore amounting to 105,000.

38. The parallel between this district and Muzaffarpur as regards variation still holds. There is a slight increase in the Madhubani subdivision in the north (+2·70 per cent.): in the Sadr subdivision in the centre the population is practically stationary (−0·17 per cent.), while Samastipur in the south shows a decrease (−4·58 per cent.). The loss is greatest in Dalsingh Sarai and Samastipur thanas (−10·72 and −7·56 per cent. respectively), which are the areas where cholera and plague are acute. Roserha on the other hand which has recently been transferred from the Sadr subdivision and where plague is also acute shows a slight increase. Of the two thanas in the Sadr subdivision Bahera shows a slight increase and Darbhanga a slight decrease. In the Madhubani subdivision all thanas show an increase, Madhubani itself showing the largest (+5·23 per cent.). That the explanation of these variations is to be sought rather in the vital occurrences of the last few years than in wholesale migration is shown by the record of births and deaths. For the last seven years of the decade there has been a steady excess of births over deaths in every thana of the Madhubani subdivision: in the Sadr subdivision there has almost been equilibrium, the births slightly predominating: in the Samastipur subdivision there has been a net loss of 12,000 in Dalsingh Sarai, one of 9,000 in Samastipur, and one of 2,000 in Warisnagar, while there has been a net gain of 4,000 in Roserha. The correlation between these figures and the variations in the different thanas would seem to be clear. The greater mortality in the south is ascribed to the prevalence of plague and an increase of malaria. Plague has never become endemic in the north of these districts, probably because mud-walls, which favour the existence of rats, are less common in these parts than *tatti* walls: the increase of malaria is ascribed to the diversion of water by the Punwa *bund*. It is difficult to explain the reasons of the increase of population in Roserha thana; but it will be noticed that the density of population is less here than in the other thanas in the south, and where the population is less dense, epidemics have the less chance of spreading. The centre of population is still shifting to the north as in Muzaffarpur, and the density of population on the rice lands of the north has now become greater than on the higher lands of the south. One other point may be noticed in which Darbhanga affords a parallel to Muzaffarpur: in both cases the population stands practically where it stood in 1901, the gains of 1901—1911 being neutralized by the losses of 1911—1921; the difference is that the

DARBHANGA	1921		1911	
	Males.	Females.	Males.	Females.
Actual population	1,420,719	1,492,810	1,412,689	1,517,018
Immigrants	20,368	48,399	27,160	59,585
Emigrants	75,749	51,061	102,675	78,391
Natural population	1,475,100	1,495,472	1,438,184	1,500,816

intervening gain and loss have been much greater in Muzaffarpur than in Darbhanga. The marginal statement shows that both immigration and emigration have been much greater in of both sexes, the decrease being more marked in the case of emigration. It is

the relatively greater decrease of emigration and the greater natural increase

of population that has spared Darbhanga from the great loss of population recorded in Muzaffarpur.

39. If the population of Muzaffarpur and Darbhanga now stands where it stood twenty years ago, the population of Bhagalpur has suffered an even greater set-back for the district to-day stands where it stood thirty years ago. Until this census Bhagalpur had shown a steady increase at every census. At the first census the rate was 7·8 per cent.: at the second in 1891 it was 3·3. Between 1881 and 1891 many deaths had occurred from fever and cholera, and the population of the Sadr subdivision was stationary, being saved from a decline only by the growth of Bhagalpur town. In the south, the Banka subdivision was also stationary. To the north of the Ganges, Madhipura was decadent chiefly owing to the westward movement of the Kosi throwing large areas out of cultivation in Kishanganj thana. Supaul on the other hand showed a substantial increase of 9·5 per cent. which was partly ascribed to improved enumeration. By 1901 the rate of increase had declined to 2·8 per cent. The district had been visited by two famines in the interval but it was the thanas chiefly affected by them which showed an increase at the census. Kishanganj again showed a decline partly owing to the unhealthiness of this area and partly to the action of the Kosi, but Partapganj, another very unhealthy area, showed a phenomenal increase owing to the construction of the railway. By 1911 the rate of increase had declined still further to 2·4 per cent. On this occasion Supaul, which till then had always shown the highest rate of increase, fell away and was the only subdivision to show a decline. Madhipura on the other hand showed an increase. For this Kishanganj was chiefly responsible, where the continued westward movement of the Kosi had permitted a large area of swamp and jungle to be brought under the plough; and the population was further increased at the time of the census by a large number of labourers temporarily collected to cut the crops. A large increase in Bihpur thana, also ascribed to extension of cultivation, saved the Sadr subdivision from decline. Banka in the south was stationary.

40. The last decade started badly. In 1911 there was abundant rain and the crops were good but outbreaks of cholera and fever raised the death-rate. The following two years were fairly healthy and so was 1914, when in spite of floods in the Kosi and the Ganges the number of deaths from fever was

BHAGALPUR.	Population, 1921.	PERCENTAGE OF VARIATION.	
		1911—1921.	1901—1911.
DISTRICT TOTAL ...	2,033,770	- 4·93	+ 2·41
Sadr Subdivision ...	574,081	- 4·06	+ 2·21
Sultanganj ...	96,612	+ 1·49	+ 0·03
Bhagalpur ...	173,518	- 6·30	- 2·53
Colgong ...	198,382	- 4·61	+ 1·00
Bihpur ...	105,569	- 4·06	+14·55
Supaul Subdivision ...	488,557	- 1·04	- 3·37
Supaul ...	353,897	- 0·62	- 0·97
Partapganj ...	134,720	- 2·11	- 9·08
Madhipura Subdivision ...	578,568	- 5·09	+ 8·99
Bangaon ...	145,398	- 5·40	- 7·58
Madhipura ...	253,740	- 11·67	+ 5·95
Kishanganj ...	174,430	+ 7·01	+89·85
Banka Subdivision ...	392,564	-10·30	+ 0·86
Amarpur ...	127,862	-17·73	+ 1·27
Katoria ...	118,041	- 8·76	- 1·23
Banka ...	162,161	- 7·84	+ 2·23

unusually low. In 1915, there was a severe outbreak of cholera in the Supaul and Madhipura subdivisions, followed by a worse outbreak in the same area in 1916; cholera indeed continued to take heavy toll in this district till the year 1919. The rains of 1916 and 1917 had been good and so had the crops. In 1918 the rains continued good down till the middle of September when there was a complete cessation. In the south of the district the rice crop was a failure and famine had to be declared in parts from June to December in the following year.

Prices rose in sympathy and meanwhile the distress of the people was increased by the influenza epidemic which raised the death-rate of 1918 to 52·2 per mille, against an average of 32·9

for the preceding five years, and that of 1919 to 41·3 : meanwhile the birth-rate of 1919 fell to 28·9 per mille or nearly 10 per mille less than the average of the previous five years. The excess of reported deaths over births was 36,000 in 1918 and 26,000 in 1919. It was not till 1920 that the balance between births and deaths readjusted itself in favour of the former. During these ten years there were in all 805,000 births and 728,000 deaths, the net natural increase recorded being 77,000 against 103,000 in the previous decade.

41. At this census it was shown that the population of the district had decreased by 105,548 persons or 4·93 per cent. This is a larger decrease than has occurred in any other district, the figure for Monghyr which comes next being slightly lower. The loss is greatest in the south, in the Banka subdivision, where all the three thanas show losses varying from 3·78 to 17·78 per cent. It is here that famine was declared and the people have learned to emigrate in large numbers. 20,000 persons emigrated from this subdivision between the preliminary and final enumerations. In the north there has been a heavy decrease in Madhipura thana (−11·67 per cent.), but this is largely owing to migration into the adjoining thana of Kishanganj (+7·01 per cent.), under pressure of the Kosi floods. Elsewhere the decrease is general and must be ascribed principally to the loss of life owing to disease and scarcity

BHAGALPUR.	1921.		1911.	
	Males.	Females.	Males.	Females.
Actual population	1,014,384	1,019,386	1,057,876	1,081,442
Immigrants	39,533	44,845	65,973	69,929
Emigrants	87,517	89,834	84,925	83,972
Natural population	1,062,688	1,058,572	1,176,823	1,094,485

and fall in the birth-rate with consequent failure to make good that loss. The movement of the people has produced an effect on the actual population different to that produced in the districts of the Tirhut Division. Emigration has increased slightly in the case of both sexes, while immigration has fallen off to the extent of 52,000, the combined effect of the two leaving the district a loser as compared with 1911 to the extent of 56,000. This, however, only accounts for a little over half of the decrease that has actually occurred, and the rest must be put down to the epidemics and scarcity of the decade.

42. The low density of population in Purnea has for years proved an inducement to immigration, and it is immigration and not natural increase which accounts for most of the development of population that has taken place in the last fifty years. Down to 1891 there had been a steady increase, of 7·8 per cent. in the first decade and 5·2 in the second. Purnea is never a healthy district but in the years 1891—1901 the mortality was so great that the population declined by 3·6 per cent. The reported deaths exceeded the births by 38,000 and in the year before the census the death-rate rose to 57 per mille, of which cholera was responsible for nearly half. The decrease on this occasion was general in all three subdivisions. In the decade ending with the census of 1911 the public health improved and there was an increase of 5·98 per cent. on the population of 1901. The increase occurred mostly in the Sadr subdivision, the advance being most rapid in Dhamdaha and Katihar thanas. Katihar was a rapidly developing railway centre at the meeting point of the Bengal and North-Western and Eastern Bengal railway lines: Dhamdaha on the bank of the Kosi was in 1891 very largely occupied by high grass jungle to which immense herds of cattle were sent all through the cold and hot weather for pasture—in fact special arrangements had to be made on that occasion to enumerate the herdsmen. By 1911, thanks to the westward movement of the Kosi, this jungle was rapidly developing into a highly cultivated tract. The Araria subdivision also showed a general, if less rapid, increase but Kishanganj, which is notoriously unhealthy, showed a slight decrease which would have been greater but for the development of the jute-growing centre of Bahadurganj.

43. The ten years that have elapsed since the last census have not been healthy ones, the number of deaths being 650,000 and the number of births

PURNIA.	Population, 1921.	PERCENTAGE OF VARIATION.	
		1911-1921.	1901-1911.
DISTRICT TOTAL	2,024,608	+ 1.76	+ 5.98
Araria Subdivision	455,974	+ 3.58	+ 5.58
Araria	209,691	- 0.94	+ 5.29
Forbesganj	152,536	+ 9.73	+ 7.57
Raniganj	93,697	+ 4.65	+ 2.82
Kishanganj Subdivision	560,733	- 7.57	- 2.06
Kishanganj	129,130	- 11.73	- 2.90
Bahadurganj	192,141	- 6.85	+ 1.47
Islampur	239,467	- 6.02	- 4.29
Sadr Subdivision	1,007,896	+ 6.91	+ 12.11
Purnea	149,045	- 6.71	+ 2.45
Amaur	122,014	- 8.32	+ 5.93
Dhamdaha	244,122	+ 38.42	+ 19.21
Korha	121,316	+ 2.74	+ 7.97
Gopalpur	75,097	- 7.07	+ 3.37
Kadwa	164,728	+ 3.27	+ 12.82
Katihar	141,574	+ 7.55	+ 33.94

664,000, the excess of births (14,000) being much less than in the previous decade when it amounted to 34,000. The year 1911 was a year of splendid crops, but it was also a year of cholera and fever outbreaks and the number of deaths reported in the year exceeded the number of births. The crops were not so good in 1912, but the people were healthier and they had the surplus stocks of three good years behind them while the high price of jute, which is extensively cultivated in the district, was a source of much profit. The crops were good again in the

following year and the birth-rate reached its highest point (36.95 per mille). In 1914 there was some depression, for all three of the principal crops were affected by the scanty rainfall and the price of jute fell. In 1915 there was a cholera epidemic which caused over 6,000 deaths and there were further epidemics of this disease in every subsequent year of the decade except 1920. By 1917 the high prices of imported articles caused by the war were beginning to tell on the resources of the people and owing to the impossibility of obtaining railway wagons the jute trade came almost to a standstill. In 1918 the crops generally failed and an unprecedented rise occurred in this district as elsewhere in the price of food-grains. The total number of deaths in 1918 amounted to 60,000 or 22,000 in excess of the births. In 1919 the birth-rate fell to 20 per mille, the decrease being less marked than in other districts as the average of the previous five years was 33.7. Influenza was still prevalent in the early months of the year and there was a good deal of distress which called for the distribution of advances. The year 1920 was a specially healthy one, but prosperity was impaired by the abnormal fall in the prices of jute and mustard seed and by the winter rice being affected by a badly distributed rainfall.

44. The present census shows an increase of 34,971 over the population recorded in 1911. The natural increase for the decade amounted to 14,756 of which 12,104 are to the credit of the female sex. The explanation of this remarkable difference probably is that immigrants only figure in the vital statistics once and that is when they die: as male immigrants are more numerous than female immigrants, male deaths must preponderate in the statistics. The increase is greatest in the Sadr subdivision, the area affected by the western movement of the Kosi which has now swung right across into Bhagalpur. The high grass jungle described in the report of 1891 has now become one of the most fertile and best cultivated areas in the district and Dhamdaha is now, with the exception of Katihar, the most densely populated area in the subdivision. It is here that the increase of population is greatest (+38.42 per cent.). In the Araria subdivision there is an increase of 3.58 per cent.: the population of Araria thana is stationary, but Forbesganj (+9.73 per cent.), and Raniganj (+4.68 per cent.), both show considerable increases. In the Kishanganj subdivision the population has decreased in every thana: this

is a very unhealthy area which showed a decrease at last census also. It is

PURNEA.	1921.		1911.	
	Males.	Females.	Males.	Females.
Actual population	1,043,333	981,275	1,016,421	973,216
Immigrants	112,521	91,273	117,690	81,179
Emigrants	13,745	14,079	20,505	17,943
Natural population	944,257	904,081	919,236	909,980

however probable that some part of the decrease that has now taken place (—7·57 per cent.), is connected with the slump in the jute trade. The soil of Purnea is fertile, the rainfall is plentiful, the rents are low and the population is sparse: consequently the stream of

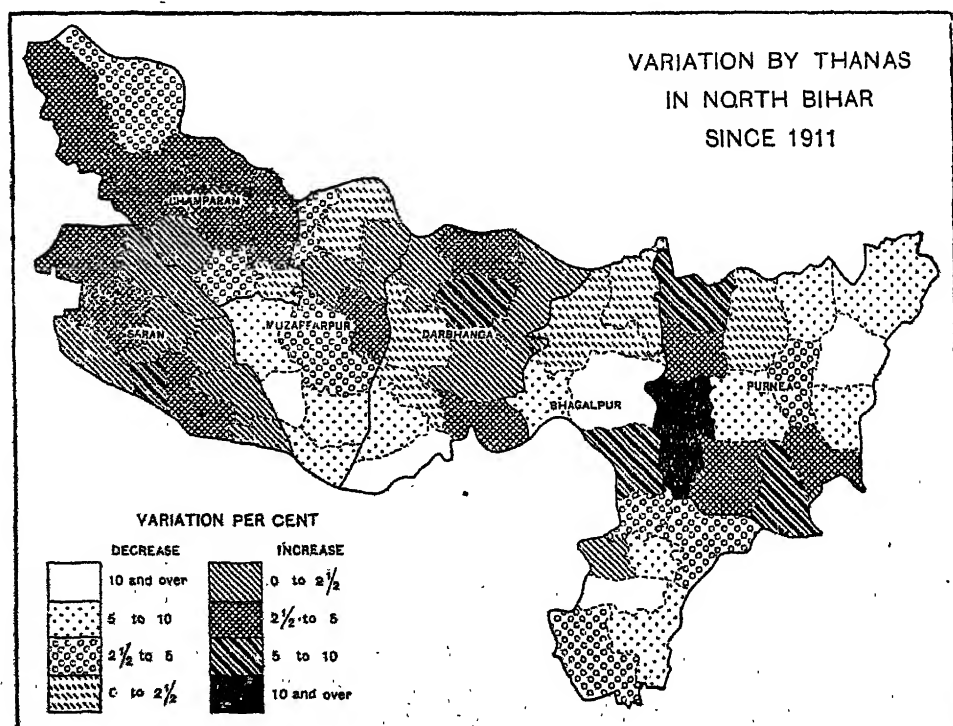
immigration is always far stronger than that of emigration. On this occasion the district has gained less in male population by migration and more in female population than in 1911. The explanation of this is that the original settlers are males and that the female sex tends to follow them to their homes: although therefore the number of male is still in excess of the number of female immigrants, the population of female immigrants is increasing and tending to bring about equilibrium of the sexes.

45. Of the six districts of North Bihar therefore there has been an increase of population in three and a decrease in the other three. These

NORTH BIHAR :

SUMMARY.

variations cannot be explained by migration, though the decrease of emigration accounts in part for the increased proportion of males in the actual population. The decrease of population must be put down to the epidemics of the last decade, particularly to the influenza. The increase in Saran has been general and is due to a decrease in the number of emigrants.



The density of population in this district is 872 to the square mile; the population is almost entirely agricultural and it needs no argument to show that unless some radical and hitherto undreamt of change is introduced into the system of agriculture the soil cannot bear a greater pressure of population than it is doing at present. The revisional settlement has shown that the cultivated area has increased and that the scarcity of pasturage for the cattle has become a menace. It seems improbable that any further substantial increase will occur in the population of this district. In Champaran the case is different. The standard of cultivation is not so high as it is in Saran, and in many parts cultivators are in possession of more land than they can cultivate.

In the last twenty-five years there has actually been a reduction in the cultivated area. This means that there is still room for expansion and intensification of agriculture in several of the thanas. Rents are low, being on the average less than half what they are in Saran, and there is reason to suppose that immigrants will still be attracted to the district, especially to the northern and western parts of the Bettiah subdivision, where the development would be rapid but for the prevalence of malaria. In these respects Purnea resembles Champaran. Both districts run up towards the foothills of the Himalayas and parts of them are extremely malarious. Rents in Purnea are even lower than they are in Champaran and the density of population is less. There is ample room for the expansion of cultivation particularly now that the Kosi has swung right across into Bhagalpur district and there is little doubt that the population would increase rapidly but for the scourge of malaria. On this occasion there has been a sharp decrease of population in the Kishanganj subdivision owing to the ravages of malaria and a temporary slump in the jute trade, but this has been more than made good by the increase of population in Araria and in the areas reclaimed from the Kosi in the Sadr subdivision. In Muzaffarpur and Darbhanga there has been a heavy decrease of population in the south while in the north, where the density of population is already greater, it has been more nearly stationary. The gradual northward movement of the population is still marked and is apparently continuing. The underlying reasons for this movement seem to be that the south of these districts is less healthy and that on the whole rents are lower in the north while the cultivation of rice which predominates in the north is more remunerative and capable of supporting a denser population. Here, as in Saran, it is impossible to expect a considerable expansion of cultivation or of population. A tenth part only of these districts is uncultivated but cultivable and nearly half of this is devoted to mango groves which are valuable for food, timber and fuel; the remainder barely suffices for the pasturage of cattle. The density of population in Muzaffarpur is 907 persons to the square mile and in Darbhanga 870. The population is predominantly agricultural and is likely to remain so, for there is no mineral wealth to attract any industry unconnected with agriculture. In these circumstances it is impossible to suppose that an increase of population is either likely or desirable. Bhagalpur shows a loss of population of no less than 4.93 per cent. which has occurred throughout the district, except in Sultanganj and Kishanganj, into the latter of which population has moved as the result of the westward movement of the Kosi. The loss is heaviest in Amarpur in the south where famine occurred in 1919 and from which the people have learnt to emigrate in large numbers. The loss is also marked in Madhipura, but this is connected with the movements of the Kosi and is the reverse aspect of the increase of population in Kishanganj. Emigration is less important from this district than from Tirhut; but the decrease of immigration accounts for a considerable part of the loss of population. The north of the district is cultivated in the intervals between the floods of the Kosi and to a smaller extent of the Tiljuga. These circumstances are obviously not compatible with the existence of such a dense agricultural population as is found in the Tirhut Division; in the Madhipura subdivision the density of population is at present only 492 to the square mile and in the Supaul subdivision it is 523, but the development of rice mills and other industries connected with agriculture suggests the possibility of some increase of population in this area. In the south the population is more sparse; cultivation is 36 per cent. of the cultivated area is dependent on the maintenance of artificial irrigation and the proportion of uncultivable land is high. The proportion of current fallow is high also, but that only means that the soil is poor and that the uplands in the hilly areas are only cultivated once in two or three years. The density of population in the Banka subdivision in the south is only 332 persons to the square mile. Possibly with a more careful organization of the irrigation channels and improvements in the system of agriculture there might be some increase of population, but experience generally shows that it is extension and not increased efficiency of cultivation that leads to an increase of the agricultural population, in so far as increased efficiency involves the use of labour-saving devices and the economy of man-power. It is conceivable that some improvement might be brought to the doors of the cultivator which

would postpone the operation of the law of diminishing returns without any improvement in his efficiency or in his standard of living: in such a case the population would probably increase up to a point. But in so far as the improvements issued from the increased efficiency of the cultivator himself and an increased capacity for looking before and after it is likely that the population living on the soil would if anything tend to decrease, liberating an increased proportion of the community to other pursuits. Although therefore future censuses will probably show that the ground lost in the last decade has been made good, Bhagalpur is not, so far as can be seen at present, a district where any great expansion of population is likely to occur. So far as North Bihar therefore is concerned, the point of maximum population seems to have been reached some years ago in the Tirhut Division, except in Champaran in Purnea there is still room for more population and possibly also to a less extent in Bhagalpur.

SOUTH BIHAR.

46. The increase of population in Patna district since 1872 amounts to 18,513 only. This is the merest fraction of the increase that has taken place in all other districts, the next smallest increase being in Angul where it amounts to 104,200. The second census showed a great increase (196,860) on the population of 1872, but too much reliance should not be placed on the figures of the former year.

PATNA.	Population, 1921.	PERCENTAGE OF VARIATION.	
		1911—1921.	1901—1911.
DISTRICT TOTAL	1,574,287	- 1.93	- 0.95
City Subdivision	112,769	- 19.49	- 0.85
Patna City	119,978	- 11.83	+ 1.01
Birahor Ward	21,335		
Bultanganj Ward	8,847		
Alamganj Ward	17,138		
Khajie Kajan Ward	28,515		
Chauk Kajan Ward	13,717		
Malsalami Ward	11,428		
Rural area	16,794		
Sadr Subdivision	210,720	+ 4.74	- 0.29
New Capital	9,453		
Bankipur	14,548	- 6.84	- 1.46
Phulwari	95,148	+ 3.06	+ 0.67
Masaurhi Buzurg	115,572		
Dinapore Subdivision	326,330	+ 3.71	- 0.33
Maner	80,281	+ 0.38	- 7.86
Dinapore	64,451	- 2.79	- 4.11
Bikram	181,598	+ 5.90	+ 5.17
Barh Subdivision	354,833	- 5.38	+ 3.59
Patwa	70,190	- 6.10	+ 2.96
Barh	193,517	- 2.17	+ 1.01
Mokameh	91,117	- 13.05	+ 9.46
Bihar Subdivision	589,835	- 0.95	- 4.30
Bihar	335,619	- 0.10	- 4.81
Hilsa	188,493	- 1.90	- 4.03
Islampur	75,523	- 2.69	- 2.65

At the third census there was still a small increase of 16,617, but since then there has been in the last thirty years an aggregate loss of 194,964. This is partly due to the fact that the city of Patna and other towns on the banks of the Ganges are decadent. The commerce, which supported them for so long when the river was the chief artery of communication between Bengal and upper India, has been diverted to other channels and their occupation and with it a good deal of their population has gone. The loss is also due even more to the ravages of epidemic disease. Since 1900 when it first broke out the plague alone has caused over a quarter of a million deaths in this district. It was raging in epidemic form at the time of the census of 1901 and the decrease that is shown to have occurred in

that year must be discounted to some extent on that account. It continued to deal destruction during the following decade also, but the number of deaths that it has caused since 1911 is 81,000 or 59,000 less than in the previous decade, and the last of the really bad outbreaks when the mortality rose to over 20,000 was in 1911. Violent outbreaks of cholera also are apt to occur in this district as an aftermath of the floods to which the district is liable. The high bank of the Ganges prevents the water that accumulates during the rains from flowing off rapidly and year after year a large tract of the district immediately to the south of the river becomes a sheet of water, which, while it allows wonderful *rabi* crops to be raised with the minimum of labour, does so at the cost of outbreaks of fever and cholera. Cholera has caused over 100,000 deaths since 1900, the mortality exceeding 50,000 in each decade. These two influences—the ravages of disease and to some extent the decline of

the river trade—caused the decrease of the population shown by the census of 1911 and they are responsible for the further and larger decrease now shown.

47. The year 1911, as elsewhere in Bihar, was one of good crops and bad health. Plague, cholera and fever were all active and although the birth-rate was practically as high as it has ever been since, the number of deaths exceeded the number of births by over 10,000. In 1912 the rain was deficient and badly distributed, the winter rice crop was affected and prices rose. But the public health was good, the birth-rate reaching its highest point, which was a shade higher than in 1911, and the death-rate dropping from 49·18 to 32·33 per mille. The year 1913 was one of high floods and cholera and in 1914 the mortality from plague rose again to 11,000. The number of births however remained well in excess of the number of deaths till 1917, when outbreaks of cholera, plague and fever raised the number of deaths to 70,000, or 4,000 in excess of the births. This was again a year of floods and the *bhadai* crops in the *diaras* of the Dinapore and Barh subdivisions were washed away. Worse was to come in 1918 when to outbreaks of cholera and plague was added the influenza epidemic. This year the death-rate rose to 63·0 per mille and the number of deaths was 41,000 in excess of the births. The failure of the rains in September was aggravated by a heavy flood in August and the outturn of both rice crops was far below the normal. To complete the picture the *rabi* crops in the Mokameh Tal were damaged by insect pests and completely destroyed over an area of seven or eight square miles. In 1919 as the result of the previous year's distress the birth-rate fell to 31·7 per mille against an average of 40·2 for the previous five years but the death-rate also fell to 31·1, or less than half what it had been in 1918; the crops were excellent and, but for the complete exhaustion of stocks in 1918, prices would have fallen much more rapidly than they did. In 1920 the birth-rate recovered itself to 35·1 per mille. In the course of these ten years the natural increase as shown by the returns of vital occurrences was 5,000 only, the number of births being 635,000 and the number of deaths 630,000. This increase was confined entirely to the male sex, the net increase for which during the ten years was 8½ thousand while in the case of the female sex there was a net decrease of 3½ thousand. The decrease of 31,725 or 1·98 per cent. which has occurred since 1911 is accounted for by the decrease in the City, Barh and Bihar subdivisions. The loss in the municipality is shown in full by the decrease in the figures for the City subdivision, for the City figures include the population of the New Capital. Non-co-operation caused special difficulties in the enumeration of this town and undoubtedly led indirectly to a certain number of omissions. How many the omissions were it is impossible to say, but enquiries from various sources support the view that they were not sufficient to vitiate the figures seriously. It must also be remembered that there was no difficulty on account of plague at this census as there had been in 1911; the one difficulty may reasonably be set off against the other and it follows that the decrease of the population in the municipal area cannot be explained away on this ground. It must be ascribed to the liability of the town to certain diseases, specially plague and to the loss of its economic *raison d'être*. In the Barh subdivision the decrease amounts to 5·38 per cent. The loss is most marked in the Mokameh thana where it is accounted for by the fact that the census returns of 1911 were swollen by the presence of thousands of immigrant labourers cutting the *rabi* crops in the Mokameh Tal; in 1921 the crops had been cut before the census and the Tal was deserted on the night of March 18th. The population of the Bihar subdivision shows a generally distributed and not serious decrease; the decrease in this area was much larger in the previous decade. The Sadr and Dinapore subdivisions, which both lost at the last census, now both show an increase in every thana. The most important event that has occurred in this subdivision. This has resulted in the creation of a new town with a population of 9,453 persons imported from elsewhere. A further displacement of population occurred in connection with the acquisition of a site for the university. The original population of the land acquired for these projects has migrated into the surrounding villages and this fact accounts for a general increase of population in this neighbourhood.

48. There has been a decrease in migration both to and from this district, the decline in emigration being the more marked. But the probable result

PATNA.	1921.		1911.	
	Males.	Females.	Males.	Females.
Actual population	507,701	786,586	808,016	797,990
Immigrants	96,524	49,455	33,241	53,865
Emigrants	68,965	68,949	95,459	78,436
Natural population	540,142	781,047	865,234	822,567

of a decrease of emigration is that more males will be found at home than would otherwise have been the case, and in the case of Patna the facts bear out this expectation; for while the loss of males in the actual population is only just over 2,000, the loss in females is over

33,000. In other words here, as in a number of other districts in Bihar, the real loss of population in the last decade is marked by a decrease in emigration. Plague and influenza, so far as they differentiated in favour of either sex, have also dealt more lightly with the male sex, all of which causes have tended to increase the proportion of males in the population.

49. The trivial increase of 18,513 that has occurred in Patna district since 1872 is in striking contrast with what has been taking place in the adjoining district of Gaya where in spite of emigration on a large scale there has been a total increase since

1872 of 203,818. The increase of 176,967 that took place between the first and second censuses is no doubt largely illusory; on the other hand the small increase of the following ten years disguises the true growth of the population because the census proved that the number of emigrants from this district was far larger in 1891 than it had been ten years before. The decade ending in 1900 was an unhealthy one and the census returns of 1901 were affected by the plague, which had appeared in the district in the preceding year for the first time and caused disorganization at the time of the census; the recorded decrease of 3.67 per cent. was therefore an exaggeration of the true facts. Between 1901 and 1911 the health of the district improved and the thanas which had lost population in 1911 owing to the plague recovered ground, so that, in spite of increased emigration and an outbreak of plague at census time in Gaya town which caused some 20,000 people to leave their homes, the district showed an increase of 99,153 or 4.81 per cent. for the intercensal period.

50. The present census shows that for the last ten years the population has been stationary, the loss amounting only to 0.37 per cent. in spite of what occurred in 1918. The year

GAYA.	Population, 1921.	PERCENTAGE OF VARIATION.	
		1911-1921.	1901-1911.
DISTRICT TOTAL	2,152,930	- 0.37	+ 4.81
Sadr Subdivision	792,321	+ 0.90	+ 4.74
Gaya Town	67,562	+ 35.84	- 20.97
Gaya Mufassal	183,549	- 4.14	+ 6.40
Atri	92,130	- 2.33	+ 8.36
Tikari	155,431	- 6.15	+ 11.60
Barachatti	117,597	+ 3.18	+ 5.81
Sherghati	176,052	+ 3.63	+ 12.18
Nawada Subdivision	447,708	- 3.20	+ 1.39
Nawada	287,588	- 2.54	- 0.94
Rajauli	77,357	+ 0.09	+ 4.87
Fakirbarwan	82,768	- 8.19	+ 6.59
Jahanabad Subdivision	412,095	- 2.41	+ 9.33
Jahanabad	283,725	- 1.89	+ 7.98
Arwal	128,371	- 8.56	+ 14.06
Aurangabad Subdivision	500,805	+ 2.80	+ 4.52
Daudnagar	125,201	+ 2.89	+ 6.20
Nabinagar	109,897	+ 8.36	- 1.03
Aurangabad	265,707	- 0.54	+ 6.24

1911 was unhealthy here as elsewhere in Bihar; a large number of deaths occurred from cholera, plague and fever, but the birth-rate was exceptionally high (49.23 per mille) and the number of births remained well in excess of the deaths. In the following year the rainfall was inadequate and the crops poor, but the birth-rate remained stationary and the death-rate fell, as is usual in years when the rainfall is not too seriously in defect. The next four years were healthy ones; the death-rate which reached its lowest point in 1913 was rising throughout but only slightly, and the birth-rate was high:

1916 was the only year in which the number of births fell below

100,000 but even in that year the birth-rate was well over 40 per mille, which was the highest in South Bihar. In August of 1917 occurred a record flood, which was as disastrous to human life as to the crops. It was followed by an outbreak of cholera which caused a specially high mortality in Pakribarwan thana and Tikari town, the latter of which had already suffered from plague in the hot weather of the same year. Fever was also very prevalent in Gaya town and the surrounding country side, and the death-rate for the year rose sharply to 42·8 per mille against an average of 29·7 for the five previous years. Meanwhile the prices of articles the supply of which was not affected by the flood had risen on account of the war and the difficulty of transport resulting from it, and there was already considerable distress in 1917 which lowered the people's powers of resistance to the disasters of 1918. The early months of that year were signalized by the worst outbreak of plague and nearly the worst outbreak of cholera in the decade. The rainfall at the beginning of the monsoon period was excessive, but from the middle of September it failed, affecting all the crops of the year. The influenza epidemic was at its worst in the last two months of the year: the number of deaths from "fever" in Gaya was greater than in any other district except Muzaffarpur, but of the two districts the fever death-rate was higher in Gaya. In fact the death-rate from all causes for the year (73·3 per mille) was higher in Gaya than in any other district in the province except Shahabad, where it rose to the phenomenal figure of 80·9 per mille. For the first time in the decade the deaths were in excess of the births by 65,000, and they continued in excess for the next two years owing to the continued high mortality from fever. For the whole period of ten years however, thanks to the high birth-rate of the earlier years, the reported births (965,000) exceeded the reported deaths (834,000) by 131,000, the net increase in the male sex exceeding that in the female sex by nearly 10,000.

51. With such a high rate of natural growth it was to be expected that the population of Gaya would show little, if any, decrease at the census, and this proved to be the case for the decrease amounted to 8,080 only or 0·37 per cent., a loss of 20,686 females outweighing a gain of 12,606 males. In two of the subdivisions, Sadr and Aurangabad, there was actually an increase, but that in Sadr is directly attributable to the results of the plague in 1911, which had temporarily emptied the town of Gaya of some 20,000 of its inhabitants. Although therefore the population of the town shows an increase of 17,641 over the figure recorded at the general census in 1911, the difference between the figure of 1921 and the figure of the second census taken in June 1911 after the plague epidemic had subsided is a loss of 2,861. The heaviest losses in this subdivision occurred in the Gaya Mufassal and Tikari thanas, which had been specially afflicted with plague and cholera: influenza also had been unusually severe in the jurisdiction of Wazirganj police-station in Gaya Mufassal. In the Aurangabad subdivision the increase was heaviest in Nabinagar thana (+8·36 per cent.), a tract of poor soil and poor crops, which had shown a loss at the last two censuses. The density of population there is low, being only 365 to the square mile, and the increase is ascribed to immigration from over the border of Palamau. In the other two subdivisions of Jahanabad and Nawada there was a decrease. In the latter it amounted to 3·20 per cent.: most of this occurred in thana Pakribarwan where the loss of 8·19 per cent. is due to the violent epidemic of cholera in 1917 followed by influenza in the following year. Nawada thana also suffered badly from the influenza and shows a decrease of 2·54 per cent.: in Rajauli where it was less severe the population is stationary. In the Jahanabad subdivision, which contains the most highly cultivated and densely populated areas in the district, there has been a decrease in both thanas. Arwal thana, which at the last census showed an increase of 14·06 per cent., now shows a decrease of 3·55 per cent. This thana has been converted from waste to the most densely populated area in the district by canal irrigation and apart from the loss caused by the epidemics of the last four years it is improbable that the increase of population would have continued at the same rate in this decade as between

1901 and 1911, when cultivators were still

Sex.	1921.		1911.	
	Males.	Females.	Males.	Females.
Actual population	1,074,668	1,078,262	1,062,062	1,068,948
Immigrants	16,057	28,650	22,104	39,290
Emigrants	111,436	78,533	116,911	87,663
Natural population	1,170,047	1,128,145	1,156,869	1,147,811

clearly immigrating to take advantage of the canal. The effect of the distress of the few preceding years has been to arrest migration to some extent. The marginal statement shows that the difference between the inward and the outward flow remains the same in the case of the males as it was ten

years ago, but that in the case of the females the district has lost some 2,000 as compared with 1911. This, together with the fact that the natural increase has been more marked in the case of the male sex, helps to explain the variations in the sexes as shown at the census.

52. At the census of 1891 the recorded population of Shahabad district showed an increase of 350,108 over the figure recorded in 1872, but since then the population has steadily declined and the excess over 1872 is now reduced to 106,350 only. The

increase that took place between 1881 and 1891 was largely the result of immigration, the natural population showing no increase owing to the persistent attacks of fever which have been the scourge of the district since 1879. By 1901 the growth had turned into a decline of 97,883 or 4·8 per cent. There had been continued epidemics of fever and at the time of the census the first outbreak of plague in Arrah town caused a panic and a general exodus of the population. The only part of the district to show an increase was the Sasaram subdivision where the construction of the "grand chord" line of the East Indian Railway had attracted a large labour force. Between 1901 and 1911 plague became endemic and caused 68,000 deaths, cholera caused 60,000 deaths and epidemics of fever continued to do much damage. There were also four years of short crops which must necessarily have impaired the vitality of the people to some extent and at the same time encouraged the habit of seeking employment elsewhere. The tide of migration turned strongly against the district, so that in spite of a net excess of births over deaths of 20,000 the decrease of 97,036 or 4·94 per cent. recorded at the census of 1911 was not unexpected.

53. The last decade has been an even less healthy one than its predecessor. Heavy rain and floods in the first year led to outbreaks of cholera, plague and

SHAHABAD.	Population, 1921.	PERCENTAGE OF VARIATION.	
		1911—1921.	1901—1911.
DISTRICT TOTAL	1,816,821	- 2·92	- 4·84
Badr Subdivision	627,795	- 0·54	- 2·82
Arrah	275,866	+ 0·46	- 12·64
Shahpur	163,823	- 5·08	- 11·88
Piro	198,806	+ 1·79	- 4·06
Buxar Subdivision	352,137	- 8·05	- 8·10
Buxar	181,274	- 11·80	- 4·85
Demrion	220,863	- 5·67	- 10·05
Sasaram Subdivision	538,803	- 1·01	+ 0·68
Bikramganj	149,737	- 1·45	+ 3·24
Karghar	95,512	- 4·07	+ 2·92
Sasaram	153,116	- 1·54	- 3·41
Dehri	95,588	+ 4·19	+ 1·70
Rhabhua Subdivision	297,936	- 2·96	+ 3·22
Mohanua	132,822	- 8·11	- 3·92
Rhabhua	165,664	- 2·85	+ 2·80

fever and the deaths were in excess of the births by nearly 7,000. There was a serious outbreak of plague again in 1912 though the general death-rate fell by over 13 points per mille. In 1913 the land had rest; the birth-rate stood at 46·88 and the death-rate at 31·41 per mille, which were respectively just under 7 points above and just over 11 points below the average of the previous five years. The outbreak of plague in 1914 was the worst that there had been since 1911, but in other respects the year was healthy. In 1915 floods occurred with cholera and fever in their train. In 1917

the Ganges was again in high flood and fever, cholera and plague combined to

raise the number of deaths above the number of births, a position which it retained till after the census. In 1918 plague caused 13,000, cholera 21,000 and fever (which includes influenza) 103,000 deaths. The total mortality for the year was 151,000 or 76,000 in excess of the number of births, the death-rate being 80·9 per mille, the highest recorded in any district during the year. In other words out of every 100 persons alive in the district at the beginning of 1918, 8 were dead by the end of it. In 1919 and 1920 the death-rate fell to a more or less normal figure, but the birth-rate fell in 1919 to 34·3 per mille which was nearly 10 points below the average of the years 1914—1918 and it only showed a slight recovery in 1920. Since 1911 the number of deaths, which exceeded the number of births in five of the ten years, amounted to 776,000 against 791,000 births, the net natural recorded increase therefore amounting to 15,000. As in the case of Patna, this natural increase was confined entirely to the male sex, the number of females according to the vital statistics having decreased by 5,000 in the ten years.

54. The census showed a decrease in the population of 48,839 or 2·62 per cent., shared by all subdivisions. The loss is greatest in the Buxar subdivision where it amounts to 8·05 per cent. The two thanas in this subdivision, Buxar and Dumraon, are those in which plague has been most destructive in the last ten years: Buxar also suffered from a virulent outbreak of cholera in 1918 and Dumraon was similarly afflicted in 1917 and 1918. The loss in the adjacent Sadr subdivision is lighter than in any other. Shahpur thana which showed a loss of 11·38 per cent. at the last census again shows a loss of 5·06 per cent.; the other two thanas show a slight gain. In the case of Arrah this may be ascribed to the decreasing severity of plague and to recovery from the heavy mortality caused by this disease in previous years: in Piro plague has never been so severe as in the neighbouring thanas; the loss was lightest here at the last census and on the present occasion the gain is greatest (+1·79 per cent.). In the Sasaram subdivision the loss is general except in Dehri thana,

SHAHABAD.	1921.		1911.	
	Males.	Females.	Males.	Females.
Actual population	895,608	921,213	904,950	960,710
Immigrants	14,094	35,224	13,042	41,965
Emigrants	88,184	60,169	99,681	76,615
Natural population	909,608	946,158	905,989	985,860

where the increase of 4·19 per cent. is due to the development of the lime industry and the resulting concentration of labour which, as its occupation was independent of the rainfall, had no cause to emigrate in the bad years. Karghar thana where the loss is heaviest suffered acutely from cholera in 1918. In the Bhabhua subdivision the loss of 2·96 per cent. is fairly equally shared by both thanas: plague has never assumed formidable dimensions in this subdivision but there was cholera in 1919 and the scarcity and distress led to emigration to the tea gardens. Here as elsewhere in South Bihar, there was a general decrease of migration at census time. In 1891 the number of female emigrants from Shahabad was over 100,000, well in excess of the number of male emigrants; since then the number has declined at every succeeding census and the decrease is more marked on the present occasion than in the case of the males: the result is that the decline in migration has not reduced the proportion of females in the actual population as elsewhere. In Shahabad therefore the fact that over three quarters of the loss in the actual population fell on the female sex must be ascribed to the natural decrease of the sex in the last decade.

55. The variation in the population of Monghyr has throughout followed a very similar course to that of the adjoining district of Bhagalpur which it closely resembles in physical characteristics. After the great increase recorded at the second census,

MONGHYR.

Monghyr settled down to a steady growth which has only been checked in the last decade. In the ten years ending in 1891 the increase was greatest north of the Ganges, the southern half of the district having suffered from fever and cholera and a large number of persons especially males having emigrated

from these thanas from which Calcutta and the coal-field are readily accessible. The census of 1901 was affected by the plague which had recently broken out : the mortality was not serious but the people were terrified at the new and strange disease and left their homes in large numbers. The part north of the Ganges was still immune and the population of the Begusarai subdivision again showed the largest increase. The Sadr subdivision was stationary, the variations in the thanas corresponding with the displacement of the population at the time of the plague panic; the Jamui subdivision was stationary also in spite of spreading cultivation in the hill tracts. The period 1901 to 1911 was a prosperous and healthy one in spite of epidemics of plague and fever and the natural increase of the population was marked. On this occasion the Begusarai subdivision, into which plague had now penetrated, had the smallest increase to show. The Sadr subdivision showed a general increase in all thanas except Kharagpur and Surajgarha: the population of the former of these had been swollen by plague refugees in 1901, and the latter was depopulated in 1911 by an outbreak of plague at census time and by an exodus of labourers to cut the crops in Shaikhpara. The increase in the Jamui subdivision was ascribed to the increase of cultivation in Jamui thana.

56. The year 1911 was unhealthy as elsewhere with higher mortality than usual from cholera, plague and fever but the number of births was well in

MONGHYR.	Population. 1921.	PERCENTAGE OF VARIATION.	
		1911—1921.	1901—1911.
DISTRICT TOTAL	2,028,965	- 4·92	+ 3·13
Sadr Subdivision	1,073,071	- 2·15	+ 4·22
Gouri	412,785	- 2·38	+ 6·00
Monghyr	159,591	+ 3·93	+ 18·78
Jamalpur	24,827	+ 20·95	+ 8·27
Surajgarha	74,213	- 0·49	- 12·83
Lakhisarai	119,537	- 7·86	+ 9·31
Kharagpur	139,619	- 6·36	- 5·52
Shaikhpara	142,493	- 2·02	+ 2·21
Begusarai Subdivision	588,199	- 10·06	+ 1·37
Teghra	215,550	- 10·83	- 1·86
Begusarai	370,649	- 12·01	+ 2·93
Jamui Subdivision	370,895	- 4·11	+ 3·08
Sikandra	101,446	- 5·66	- 0·66
Jamui	185,378	- 5·52	+ 20·17
Chakai	183,871	- 1·46	- 7·97

excess of the number of deaths in this and every other year of the ten except 1917, 1918 and 1919. In this district also the plague seems to be losing its force, for two-thirds of the total mortality from plague occurred in the first half of the decade. Outbreaks of cholera occurred at intervals; more than five thousand deaths were ascribed to it in 1911, 1915, 1917 and 1918, the last being the worst attack. The deaths from fever increased steadily from 1914 to 1918, the year of the influenza epidemic, and then sank to normal

again in 1920. Generally speaking the health of the district was good down to 1916. In that year the Bur Gandak was in flood in the north of the district and damage was done to property and crops, but the public health suffered little. In 1917 cholera, plague and fever brought the death-rate up to 41·6 per mille against an average of 31·8 for the five preceding years. There was also a heavy flood in the Ganges: this damaged the autumn and winter crops and reduced the stocks in hand which were further depleted by exports in response to high prices in the early months of 1918. The outbreak of cholera in 1918 was of exceptional violence and caused 16,000 deaths. In August there was heavy rain which damaged the *bhadai* crops and in September the rains ceased. All three crops were affected and in the *tal* area further damage was done by insect pests. The people, harassed by the influenza epidemic and the high prices of imported articles, with their stock of food-grains at its lowest, were thus confronted at the end of the year with a general failure of crops. In Jamui and Kharagpur thanas arrangements had to be made for the distribution of gratuitous relief and agricultural loans were distributed on a liberal scale. The able-bodied men emigrated in large numbers, in many cases leaving their families behind them to be supported by gratuitous relief. The total number of deaths in the year was 131,000 of which fever and influenza contributed 98,000. The deaths were 50,000 in excess of the births.

and the death-rate rose to 61.2 per mille. In 1919 it fell to 40.8 again, but the birth-rate dropped to 30.5 from which it again rose slightly to 31.5 in 1920. The monsoon of 1919 was a specially good one and the fine crops that resulted from it went far towards re-establishing the normal economic state of affairs. For the whole ten years the recorded births were well in excess of the recorded deaths, by 39,000 in the case of males and by 26,000 in the case of females. The census showed that the loss of population in this district was 105,534 or 4.92 per cent., only 573 less than the loss in Bhagalpur which was the heaviest in the province. There was a large gain in Jamalpur thana and a small one in Monghyr owing to the extension of the railway workshops of the East Indian Railway at Jamalpur. Otherwise there was a loss in every thana in the district. In the Sadr subdivision the loss was heaviest in Lakhisarai. In 1911 a large number of labourers were engaged in cutting the crops in Lakhisarai thana at the time of the census, but in 1921 the crop-cutting had been almost completed before the census was taken, so that the loss recorded here exaggerates the loss to the permanent population: there was however some real loss, for the total number of recorded deaths in this thana during the decade exceeded the total number of births. The District Officer reports that throughout south Monghyr agricultural conditions have deteriorated owing to the neglect of sources of irrigation and ascribes some of the loss of population in the southern thanas to this cause. The loss was heaviest however (—10.06 per cent.), in the Begusarai subdivision north of the Ganges, a fact for which it is difficult to account: but it will be noticed that the growth in this subdivision was smallest at the last census and it is possible that the same causes are at work here as in the Hajipur subdivision of Muzaffarpur and the Samastipur subdivision of Darbhanga, which it resembles in physical characteristics and in crops cultivated as well as in the fact that plague is endemic. The density of population appears here to have reached a point, reached some years ago in Samastipur and Hajipur, which was higher in proportion to its natural resources than that reached in other neighbouring tracts with the result that, as other tracts develop, the pressure in these areas is relieved. For some years past there has been in this subdivision a steady process of eviction of low caste tenants by petty *maliks* and it is probable that a number of these evicted tenants have found their way into Gogri thana in the Sadr subdivision where there has been an extension of cultivation and where the decline of the population has been much less than in the Begusarai subdivision.

57. It has been stated above that the growth of the population of Monghyr has followed a somewhat similar course to that of Bhagalpur. The two districts, however, show considerable differences in respect of migration. In 1891 the immigrants into Bhagalpur exceeded the emigrants by 30,000, while in Monghyr the emigrants were in excess. Since then the number of emigrants has been greater than the number of immigrants in both districts, but the number of emigrants has always been greater and the

MONGHYR.	1921.		1911.	
	Males.	Females.	Males.	Females.
Actual population	1,005,530	1,024,435	1,044,435	1,000,532
Immigrants	25,880	45,536	36,341	56,798
Emigrants	127,328	93,216	129,350	110,054
Natural population	1,106,978	1,075,115	1,187,777	1,149,788

number of immigrants has always been less in Monghyr than in Bhagalpur. Monghyr therefore has always lost far more by migration than Bhagalpur has done. This is still the case, for the number of emigrants from Monghyr in 1921 was very high; the

male emigrants were almost as numerous as in 1911, though there was a drop of nearly 14,000 in the female emigrants. Amongst the immigrants there was a decrease, distributed equally between the sexes. While, therefore, the turn in the tide of migration helps to explain the decrease in male population, it does not at all help to explain the decrease in the number of females. The fact that the vital statistics show a smaller natural increase of females than of males points the way to the only possible explanation of this fact,

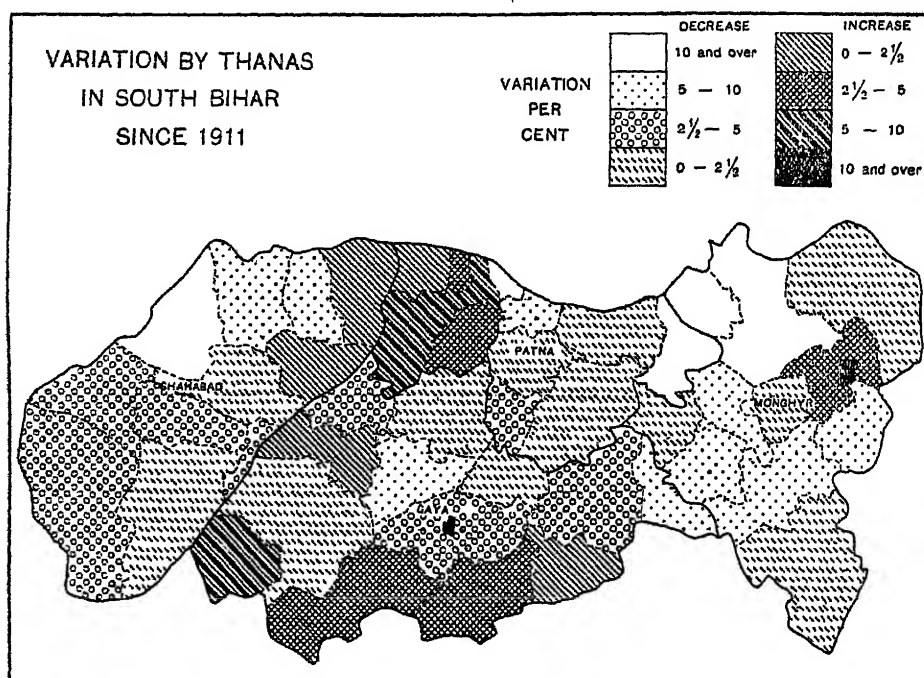
namely that the ill-health of the last few years, especially the influenza of which accurate statistics are not available, has affected the female more severely than the male sex.

58. The general loss of population and particularly of female population in South Bihar cannot be ascribed to migration, in fact in two districts out of the four migration has tended to obscure the true extent of the loss. It is due primarily to the disastrous epidemics of the last few years. In

SOUTH BIHAR :

SUMMARY.

the case of Patna the result has been intensified by the decline in the population of Patna City and the fact that the *tals* were deserted at census time, but the planting of the New Capital at the west end of Patna City has had the effect of increasing the population of the Sadr subdivision and indirectly also of the Dinapore subdivision. The density of population in the district is 764 to the square mile, being lowest in Barh where a large area remains under water for some months of the year. It is unlikely that any further great development of population will occur in this district.



In Gaya, the loss of population is confined to the female sex and is general except in Gaya town where plague had reduced the population in 1911 and in Nabinagar where the soil is poor and the pressure of population light and where immigrants had come across from Palamau. No great extension of cultivation is likely in this district either in present circumstances. There has been no great increase in the last hundred years except in Arwal and Nawada which were then largely waste and in the south of the district where there has been a gradual extension of cultivation. "No doubt in time as population increases and raiyats are available there will be an extension of cultivation but it will be slow as the land is poor and irrigation facilities are lacking. Unless some scheme is devised for irrigating the high watersheds between the rivers no rapid extension will take place." * In Shahabad the decrease has been general throughout the district except at Dehri where employment in the lime industry and workshops has attracted population. This district suffered more than any other from the influenza but the incidence of the loss in the north of the district appears to have been determined by the continued prevalence of plague. In Monghyr also the loss has been general except in the industrial area around Jamalpur. In the south of the district neglect of the sources of irrigation has contributed to the decline of population, but the loss is heaviest

* Gaya Settlement Report, page 78.

in the more densely populated areas north of the river. The reason for this loss is not clear, but it seems probable that the same causes are at work here as in the Hajipur and Samastipur subdivisions. The loss of population is more marked throughout South Bihar in the case of females which must be ascribed principally to the fact that the epidemics of the last decade have been more deadly to them than to males; in Patna and Gaya however the proportion of males has been raised by the decline in emigration.

ORISSA.

59. The recorded increase of population in Cuttack between 1872 and 1881 was 250,558 or 61·2 per cent. Although there is no doubt that the real increase was considerably less than this, it must have been great for it was at this time that Orissa was recovering from the great famine of 1866. In the next decade there was still a great increase of 142,437 or 6·46 per cent. and the increase would have been greater but for a cyclone in 1885 which blotted out the inhabitants of forty-five villages in the Patamundi thana of the Kendrapara subdivision. Between 1891 and 1901 there was a further steady increase of population throughout the district: it was during these years that the railway was built and the facilities for emigration which it offered increased the number of male emigrants at the 1901 census and thereby to some extent obscured the true growth of the population. The chief feature of the next intercensal period was a series of floods resulting in crop failures and outbreaks of cholera, thus leading indirectly to a further large increase in the number of men who migrated in search of work outside the district. The census of 1911 showed an increase in every thana in the district except two, Dharamshala and Patamundi, and in those the loss was confined to the male sex. The total number of emigrants was shown to have increased from 117,000 in 1901 to 173,000 in 1911. During this decade the total population of the district increased by 48,826 or 2·37 per cent.

60. The first four years of the last decade were healthy ones and the population prospered. In 1911 and 1913 there were floods but little damage was done to the public health.

CUTTACK.	Population, 1921.	PERCENTAGE OF VARIATION.	
		1911—1921.	1901—1911.
DISTRICT TOTAL	2,084,878	- 2·11	+ 2·37
Sadr Subdivision	1,043,301	- 2·38	+ 3·24
Cuttack	214,873	- 5·54	+ 2·03
Banki	70,110	-10·81	+ 5·27
Salipur	289,245	- 0·89	+ 7·19
Tirtol	181,549	- 1·10	+ 1·90
Jagatsinghpur	287,525	+ 0·40	+ 0·71
Kendrapara Subdivision ...	478,773	- 1·47	+ 4·37
Kendrapara	249,389	- 0·41	+ 7·97
Patamundi	120,707	+ 0·29	- 1·15
Ani or Rajabari	108,697	- 5·61	+ 2·80
Jajpur Subdivision	542,804	- 2·14	- 0·89
Jajpur	259,377	- 3·91	+ 0·60
Dharamshala	283,927	- 0·40	- 2·27

away steadily year by year until in 1920 it stood at only 31·62. In 1918 the monsoon started well; in Jajpur, Kendrapara and Banki there was excess of rain in the earlier months. There seemed at the time to be every prospect of a bumper rice crop and, so far as the shortage of facilities for transport permitted, stocks were being freely exported. But from the beginning of September the rainfall ceased and by the end of the year it was 22 inches in defect; the winter rice crop, which represents three-quarters of the agricultural resources of the district, was an almost complete failure outside the irrigated area and the *rabi* crop shared the same fate. The stocks of food-grains being

In these years the birth-rate never fell below 43 per mille and in 1914 it rose to 44·67, while the death-rate only just touched 30 per mille in 1914. In 1915 as the result of heavy rain the death-rate rose, cholera, dysentery and fever claiming many victims: on the other hand the birth-rate declined and the number of births and deaths was almost equal. During the next two years the death-rate declined again towards 30 per mille, but the birth-rate after a slight recovery in 1917 fell

already short, prices soared upwards; there was much distress and the influenza epidemic found ready victims. In this year 93,000 deaths were reported, 18,000 in excess of the number of births: the death-rate stood at 44.16 and the birth-rate at 35.75 per mille. But the effects of the failure of rain in 1918 were not fully felt till the following year. An outbreak of cholera and dysentery due to the pollution of the supply of drinking water is the usual sequel to shortage of rain in Orissa and the present occasion was no exception: 18,000 persons died of cholera in 1919, 13,000 of dysentery and 54,000 of fever and influenza, as the epidemic was still raging in the early months of the year. The total deaths rose to 113,000, 43,000 in excess of the births, and the death-rate stood at 53.74 per mille. Meanwhile relief operations were necessary in several considerable areas and the distress in the Jajpur and Kendrapara subdivisions was further aggravated by floods which damaged the all-important rice crop. A good *rabi* crop at the end of the year relieved the situation to some extent, but relief operations were still necessary in Jajpur and Banki in the early months of 1920. Later in that year a record flood occurred in the Brahmani river in the Jajpur and Kendrapara subdivisions and this again damaged the rice crop: elsewhere however the rice crop was a very good one and in the area affected by the flood the subsequent *rabi* crop was exceptionally fine. Although therefore Cuttack did not suffer from the ravages of influenza in the same way as many of the other districts it had a more prolonged trial to endure. The floods of 1919 and 1920, though they produced little direct effect on the death-rate, caused much damage to crops and houses and kept the people in a prolonged state of distress. That they effectually prevented the return of health and prosperity is very clearly shown by the fact that there was no recovery of the birth-rate before the end of the decade. The census of 1921 showed that the population of the district was 2,064,678 or 44,461 less than it had been in 1911. The loss was entirely confined to the male sex, the number of females

CUTTACK.	1921.		1911.	
	Males.	Females.	Males.	Females.
Actual population	952,543	1,112,135	1,001,175	1,107,964
Immigrants	10,361	23,224	10,849	22,905
Emigrants	173,567	82,264	118,277	54,397
Natural population	1,116,039	1,171,175	1,109,103	1,180,456

still being carried on in 1920. The marginal statement shows that, while the number of immigrants is about constant, the number of emigrants has increased by 83,147, 55,280 males and 27,867 females, since 1911. This more than accounts for the loss of population that has occurred: the natural population has in fact increased in both sexes. The emigrants migrate temporarily only and are not lost to the district. The census figures of actual population, therefore, give a picture that is misleading and unduly depressing: when the extent of the emigration that has been taking place is realized, it is found that the district is better off in point of numbers than it was ten years ago.

61. After the great famine of 1866 the population of Balasore showed a rapid jump upwards, partly no doubt unreal and due to improved enumeration, between the years 1872 and 1881.

BALASORE.

The increase in the second intercensal period was only a quarter of what it had been in the first: in the malaria-infected thana of Jaleswar in the north the population was stationary, Chandbali in the south showed rapid development and in the rest of the district the increase was steady and well distributed. Between 1891 and 1901 the general condition of the people was satisfactory in spite of a series of epidemics of cholera and a high flood in 1900 which led to emigration of males just before the census, particularly from Dhamnagar thana which alone showed a decrease. Chandbali and Basudebpur on the sea coast showed the highest rate of increase,

but the increase was general and more rapid than in the previous decade. In the year 1901 there was a serious failure of crops and, except for the year 1903, the crops remained below the normal for the whole period from 1901 to 1911: droughts in 1905 and 1906 and floods in 1907 and 1908 not only effected the crops but caused two violent outbreaks of cholera. The natural increase of the population was very slight and the bad crops led to emigration on a large scale. At the census of 1911 it was found that the population had decreased by 1.68 per cent., the only thanas that showed an increase being Jaleswar and Baliapal in the north where the crops had been less severely affected and the cholera epidemics less violent.

62. The first four years since the census of 1911 were healthy, although in three out of the four, *viz.*, 1911, 1913 and 1914, the outturn of the winter rice crop, on which the prosperity of the district depends, was little over half of the normal. During these years the

BALASORE.	Population, 1921.	PERCENTAGE OF VARIATION.	
		1911-1921.	1901-1911.
DISTRICT TOTAL	980,504	- 7.11	- 1.68
Sadr Subdivision	541,903	- 8.91	+ 0.40
Soro	218,633	- 3.52	- 1.16
Balasore	102,364	- 15.84	- 0.78
Jaleswar	53,027	- 14.29	+ 3.59
Baliapal	100,106	- 4.22	+ 3.65
Basta	67,773	- 15.60	+ 0.21
Bhadrakh Subdivision	438,601	- 4.78	- 4.25
Bhadrakh	181,841	- 2.42	- 3.65
Rasudehpur	71,026	- 9.20	- 5.90
Dhamnagar	129,056	- 4.14	- 2.81
Chandball	56,678	- 7.74	- 6.77

reported births were well in excess of the deaths; the birth-rate varied from 38.11 to 40.2 and the death-rate from 28.37 to 31.65 per mille, the natural increase amounting to 36,000 in the four years. But the remaining years of the decade were disastrous. In 1917 the number of births was slightly in excess of the number of deaths, but in every other year there was a substantial excess of deaths so that on the whole period of ten years from 1911 to

1920 there was a net loss of 30,000. In 1915 and 1916 there was a shortage in the rainfall which resulted in outbreaks of cholera which were particularly severe in the Bhadrakh subdivision. The public health improved slightly in 1917, but there was much fever that year throughout the Sadr subdivision. In 1918, as the result of the failure of the rains, the outturn of the winter rice crop was only 30 per cent. of the normal which led to much distress: the cheapest common rice which had been selling at 10 seers or more in 1917 rose to seven and a half seers to the rupee and when the influenza epidemic broke out it found the people ill-nourished and with little power of resistance. Nevertheless the havoc wrought here was not so great as elsewhere, the total number of deaths from fever in this year being only 25,000. The mortality was worse in 1919 when the deaths from fever rose to 27,000 and the shortage of drinking water in the early months led to the worst outbreak of cholera that occurred during the decade. The death-rate this year reached its highest point (50.4 per mille); it fell in 1920 but was still some ten points per mille higher than it had been in the first four years. Meanwhile the birth-rate fell steadily from 1917 to 1920. Whether this was due to the wholesale temporary emigration of men in search of work outside the district or to loss of vitality from illness and insufficient nutrition in those who stayed behind, it is in either case a sure index of the prolonged distress through which the district passed. The winter rice crops of 1919 and 1920 were fair in spite of local floods but the price of common rice continued to rise until the end of the period and normal conditions had not been restored when the census was taken in 1921. In March 1921, the population of Balasore district was 75,064 or 7.11 per cent. less than it had been ten years before. The loss was general throughout the district, no single thana showing an increase, but it was more marked in the Sadr (-8.9 per cent.) than in the Bhadrakh subdivision (-4.8 per cent.). It will be noticed that in the former the number of females per cent. of the population is 50.3 while in the latter it is 55.2. This shows, what is indeed a known fact, that emigration takes place

more freely from the Bhadrakh subdivision: as regards natural population therefore the Sadr subdivision has lost even more heavily as compared with Bhadrakh than the census figures show. In the Sadr subdivision the loss is heaviest in the thanas of Balasore (—15·8 per cent.), Basta (—15·6 per cent.), and Jaleswar (—14·3 per cent.). In

Percentage of natural decrease of
six years (1915—1920) on
population recorded in
1921 in thanas of
Balasore district.

Balasore	17·1
Basta	14·5
Jaleswar	9·21
Soro	5·2
Baliapal	4·8
Bhadrakh	4·7
Basudebpur	2·9
Dhamnagar	4·8
Chandbali	0·4

Balasore and Basta the males are in excess and in Jaleswar the sexes are almost equal, so that it is clear that the decrease cannot be explained away on the hypothesis of emigration. That it is closely connected with the heavy mortality of the last six years is proved by the marginal statement which shows for each thana the percentage of the natural decrease that has taken place in the last six years to the population recorded in 1921. The percentage is highest in exactly those thanas where the census showed that the loss of population

was greatest. On the other hand a glance at this statement and consideration of the fact that the female population of Basudebpur and Chandbali in the Bhadrakh subdivision is greatly in excess of the male will show that the comparatively heavy losses in those thanas are due primarily to emigration. The conclusion therefore is that in the last six years the Sadr subdivision has fared worse than the Bhadrakh subdivision and that such losses as have occurred in the former are due to heavy mortality, largely owing to the spread of a virulent type of malaria.

The immigrants of both sexes have declined: on the other hand the emigrants have increased, particularly the males, so that the district has been a loser in both ways. But there has been, in striking contrast with Cuttack, a marked natural decrease in both sexes

BALASORE.	1921.		1911.	
	Males.	Females.	Males.	Females.
Actual population	486,122	514,882	504,615	550,953
Immigrants	10,869	17,802	12,257	20,172
Emigrants	53,251	30,026	43,319	29,157
Natural population	508,504	527,106	535,677	559,933

(males—12,000, and females—19,000) so that the district was bound to show a marked decline at the census. Migration has tended to exaggerate this loss, but the greater part of it is genuine and represents natural decrease.

63. The population of Puri showed a continuous expansion from 1872 to 1911. The rapid increase, part real and part unreal, of the first decade fell to about half in the second decade during which outbreaks of cholera imported by pilgrims to the Jagarnath temple and small-pox caused many deaths. Between 1891 and 1901 the agricultural conditions were not good; there were droughts and floods with consequent epidemics in several years: nevertheless the rate of increase rose, chiefly owing to a great concourse of pilgrims at Puri at census time. Conditions remained unfavourable to the growth of the population during the following decade also; in 1901 and from 1905 to 1908 the crops were much below the normal and in the last of these years famine conditions prevailed in limited areas and relief operations were found necessary. The same year was marked by a cholera epidemic of unusual severity. The census of 1911 showed that the increase for the decade amounted to 6,118 only. In the Khurda subdivision there was a general increase of 2·33 per cent. which would have been greater but for the temporary emigration of the male population: in the Sadr subdivision the population was stationary or barely increasing except in Puri town where there was a great drop owing to the fact that there was no festival in progress at the time of the census as there had been in 1901.

64. Since the last census the conditions have been even less favourable to the growth of the population. In 1911 the rainfall was 10 inches in defect, but the year was healthy. In 1912 the rainfall was in excess and a cyclone

in October damaged the crop of winter rice; there was a severe outbreak of cholera and the death-rate rose. The next four years were fairly healthy and the crops were fair also. The birth-rate reached its highest point (42.80 per mille) in 1914 after which it showed a steady decline to the end of the decade.

PURL.	Population. 1921.	PERCENTAGE OF VARIATION.	
		1911-1921.	1901-1911.
DISTRICT TOTAL	951,651	- 7.01	+ 0.60
Sadr Subdivision	614,754	- 6.26	- 0.34
Puri	242,190	- 7.70	- 1.43
Gop	110,337	- 4.04	+ 0.53
Pipli	262,227	- 5.72	+ 0.36
Khurda Subdivision	336,897	- 8.35	+ 2.33
Khurda	237,727	- 8.98	+ 2.71
Banpur	99,170	- 6.82	+ 1.41

In 1917 abnormal rainfall in November damaged or washed away the rice crop and relief operations had to be started in the Chilka area and in some villages in the Sadr subdivision, but owing to the stoppage of exports the price of food-grains remained lower than it would otherwise have been. There were many deaths from fever in this year and the death-rate rose by 9 points per mille. The rain-

fall of 1918 was normal in quantity but disastrously distributed. Floods occurred in June which damaged the seeds in the fields and in September the rain ceased. Owing to the outbreak of influenza at the end of the year the death-rate rose to 47.69 per mille, but it was not till 1919 that the wave broke in its full force. In that year circumstances combined to raise the death-rate to no less than 70.31 per mille. The floods of 1917 and the drought of 1918 following on a series of years in which there had been no really good crop had reduced stocks and raised the prices of local produce: the prices of imported articles had also risen as the result of four years of war. The supply of drinking water was impaired by the drought and past experience pointed to the likelihood of a severe outbreak of cholera and dysentery. In this direction the worst fears were realized and the epidemic of influenza also occurred at the same time. The number of deaths that occurred in 1919 was 72,000 or more than twice the number of births (34,000). When the rain of 1919 came, it came in excess and a large tract in the Sadr subdivision was inundated. Heavy rain fell again in November and damaged the *rabi* crop in the same area. The price of rice rose from 6½ to not quite 4½ seers to the rupee and gratuitous relief had to be distributed on a large scale in this year and continued in 1920. The distress of the year is reflected in the birth-rate of 1920 which sank to only 25.58 per mille, while the death-rate was still high, chiefly owing to heavy mortality from fever. Except in Gop thana however the rice crop of 1920 was an average one; by the middle of November the general relief work was closed down and by the end of the year the price of rice at last showed signs of falling.

65. After this chapter of disasters of which the last page had hardly been turned when the census was taken, it was only to be expected that the census would show a decrease of population. The natural decrease of the decade representing the excess of the deaths over the births was 26,000, the decrease being fairly equal between the sexes. The census showed that the population had declined by 71,751 or 7.01 per cent., the decrease of males amounting to 51,027 and of females to 20,724. The loss was shared by every thana; Khurda lost rather more than the Sadr subdivision, but on the whole

PURL.	1921.		1911.	
	Males.	Females.	Males.	Females.
Actual population	455,543	496,108	506,570	516,832
Immigrants	13,519	23,291	17,667	25,773
Emigrants	31,552	25,035	16,123	19,897
Natural population	478,576	497,352	505,026	510,456

the loss was very evenly distributed throughout the district. The migration figures throw light on this decrease. If the natural decrease in females during the last decade and the further loss by migration be deducted from the actual population of 1911, the figure arrived at is very nearly the actual number of females in 1921. If the

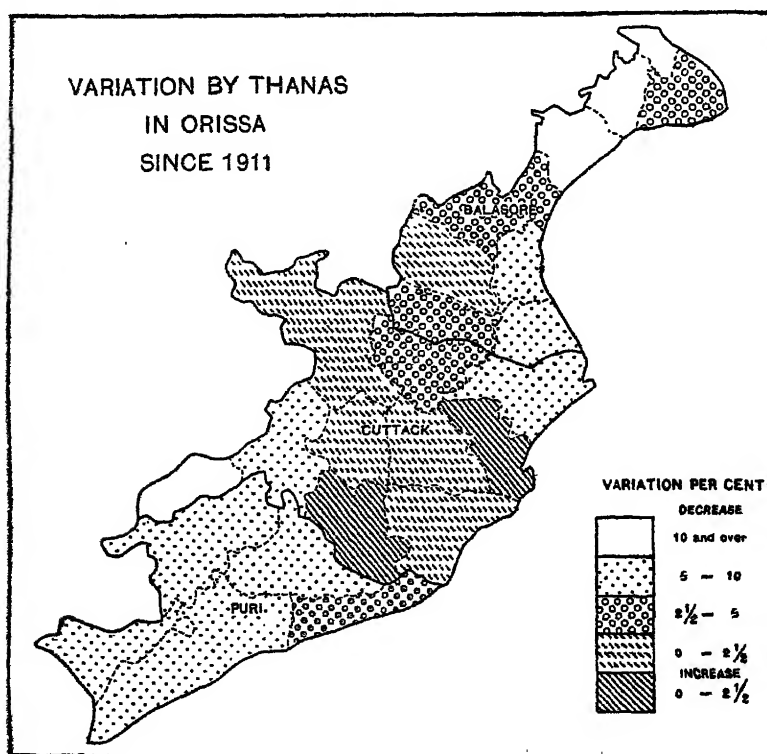
figure arrived at is very nearly the actual number of females in 1921. If the

same process is applied to the males, the result fits less neatly, but here also the greater part of the decrease can be accounted for by the recorded facts of migration and natural decrease. Puri and Balasore have both fared much worse than Cuttack during the last decade, but Puri has escaped rather more lightly than Balasore; Puri's losses have been rather less and more of them can be written off to migration.

66. Each district of Orissa shows a decline of population since 1911. Although the influenza was less severe here than in Bihar the population have had a more uphill fight: the failure of the rains in 1918 was not the end of the troubles for the crops have since then been affected by a series of disastrous floods in every district. The decrease is least in Cuttack, where it is confined to the male sex and explained away altogether by the

ORISSA :

SUMMARY.



increase in emigration. Balasore has suffered the worst of the three districts; here the loss in the Bhadrakh subdivision can be written off to a considerable extent to emigration, but the loss in the Sadr subdivision is greater and more real and must be ascribed to the prevalence of a particularly deadly form of fever. It is the less densely populated thanas that have suffered most. In Puri

also the loss is due chiefly to natural causes though emigration has helped. The experiences of the last five years have turned the thoughts of the people of the coastal districts of Orissa more than ever to emigration and it was only the railway which made emigration and the importation of foodstuffs possible that prevented a disaster in 1918-19. With the assistance of the emigrants' savings it is possible that the population of Orissa may still increase but it is doubtful if the resources of the soil are capable of bearing any greater pressure. Population already rises to nearly 1,000 persons to the square mile in parts of the fertile tract that lies between the hills of the interior and the marshes of the sea coast and although this is not so great as the density in Bihar, the very fact of increasing emigration suggests that the limit of the resources of these districts is being approached.

CHOTA NAGPUR PLATEAU.

67. Since 1872 the recorded population of Hazaribagh has increased by over half a million, but over one-half of this is shown to have occurred in the first decade and is an exaggeration of the facts. Between 1881, when the first reliable census was taken, and 1891 the increase amounted to 5·7 of the population. The north-west

HAZARIBAGH.

HAZARIBAGH.	Population, 1921.	PERCENTAGE OF VARIATION.	
		1911—1921.	1901—1911.
DISTRICT TOTAL	1,276,946	- 0·81	+ 9·39
Sadr Subdivision	590,487	- 3·60	+13·46
Barhi	50,681	- 3·33	+ 4·65
Hazaribagh	92,471	- 8·35	+ 8·81
Bagodar	69,742	- 3·36	+11·01
Barkagaon	60,670	- 1·57	+12·85
Ramgarh	88,774	-11·93	+17·76
Gumia	88,287	- 6·58	+19·62
Mandu	94,590	- 5·19	+21·53
Petarbar	66,578	- 4·69	+21·23
Kodarma	98,514	+11·03	+10·78
Chatra Subdivision	218,567	- 2·17	+ 1·43
Chauparan	61,066	- 2·81	+ 3·24
Hunterganj	71,085	+ 4·68	+ 6·42
Chatra	53,247	- 8·34	- 4·48
Simaria	33,069	-12·06	- 0·87
Giridih Subdivision	467,892	+ 3·37	+ 8·34
Gawan	63,664	- 0·71	+ 7·53
Kharagdiha	86,783	- 3·97	+ 3·66
Dhanwar	75,707	+ 2·95	+ 3·21
Giridih	129,659	- 0·13	+10·57
Dumri	112,079	+18·22	+15·16

and widespread: the mortality from fever and cholera was high and the diet of jungle roots and fruits to which the population had recourse enfeebled them and predisposed them to disease. The birth-rate also fell very low in 1897 and 1898. The census of 1891 showed a slight increase of 1·2 per cent., which would have been greater but for the tide of emigration setting strongly against the district. As before, the north-western portion of the district, except Hunterganj, was the part that lost while the Giridih subdivision showed an increase of 4 per cent. The rainfall in 1907 was badly distributed and distress followed in 1908: otherwise the ten years 1901 to 1910 were healthy and prosperous and the population increased by 110,648 or 9·39 per cent. There was an increase in every thana except Chatra and Simaria, the increase being heaviest in the south, in Mandu, Petarbar, Ramgarh and Gumia thanas which are the strong-hold of the aboriginal tribes.

68. Hazaribagh suffered from the universal unhealthiness of 1911, cholera and fever raising the death-rate to 36·61 per mille; on the other hand the birth-rate rose high to 50·57 per mille, a point which it never reached again. In 1912 the rainfall was deficient and the rice crop was a very poor one, but the next four years were generally healthy, the death-rate falling in 1913 as low as 23·46 per mille. In 1916 the birth-rate fell (to 37·7 per mille) as in every other district in the province. In 1917 began a series of cholera epidemics which lasted for three years. That of 1918 however was dwarfed into insignificance by the influenza epidemic and the general distress that resulted from the failure of the rains. The rains of that year promised well till the middle of September; every one who had a stock in hand made haste to get rid of it before the new crop was harvested, and prices fell. In the middle of September the rains stopped. The *makai* and the *mahua*, the *aghani* and the *rabi* crops were all affected and prices rapidly began to rise. The scarcity of food and clothes predisposed the people towards the influenza epidemic which reached its worst point in November. Before the end of the year 82,000 people or 63·4 per mille had perished, 68,000 dying of fever. The distress of the survivors increased during 1919, especially in the Sadr subdivision. The crops were generally worse here than elsewhere and in Giridih the population is not so entirely dependent on agriculture and the rainfall. In May the shortage of food-grains became alarming: the District Board undertook the distribution of large quantities of Burma rice and large sums were distributed as seed loans and loans for land improvement. Private charity was also organized and free food and cloth were distributed until

October to orphans and aged persons who could not emigrate in search of work. A bad outbreak of cholera occurred in this year and found ready victims amongst a population already reduced by the hardships of the last few months. The number of births reported was 20,000 less than in the preceding year, the birth-rate falling to 28·6 per mille. Fortunately, thanks largely to the distribution of seed loans at the critical time, the winter rice crop of 1919 was an excellent one: in 1920 the death-rate was again normal and the birth-rate passed it once more in its upward movement. In spite of the events of 1918 and 1919 the number of births in the whole period of ten years was 542,000 or 87,000 in excess of the number of deaths, the natural increase being shared fairly equally between the sexes.

69. According to the census the population of the district has decreased by 11,663 or 0·91 per cent. since 1911: out of this the loss that fell on the male population was 5,082 or rather less than half. The loss is greatest in the Sadr subdivision where the influenza epidemic of 1918 and the scarcity of 1919 were most keenly felt. The Ramgarh and Hazaribagh thanas have lost 11·93 and 8·35 per cent., respectively: these two thanas reported a higher rate of natural decrease (*i.e.*, excess of reported deaths over reported births) during the three years 1918 to 1920 than any others in the district and the loss of population is no doubt due to this fact. The decrease in this subdivision is lightest in Barkagaon where the natural decrease during the same three years was smallest. Kodarma is the only thana in which there has been an increase: the substantial increase here of 11·98 per cent. is due to the development of this centre of the mica industry. The prosperity of this industry during the war drew immigrants from other parts, and *pari passu* the town of Kodarma developed as a distributing centre. In the Chatra subdivision the loss is general except in the Hunterganj thana where there is an increase of 4·88 per cent. This is the thana in which the increase at the two previous censuses was the greatest, and where the density of population calculated on the cultivated area is also higher than elsewhere in the subdivision. That the relative growth or decline of population is closely correlated with the vital occurrences of the last three years is here again apparent for the net excess of deaths in Hunterganj for that period was lower than in Chauparan, Chatra or Simaria. Simaria, which is the most lightly populated thana with a density of only 88 to the square mile, is a loser to the extent of 4,537 or 12·06 per cent., the heaviest loss in the district. In 1918 Simaria had a death-rate of 78 while the death-rate of Chatra was 92 per mille; but in 1919 the birth-rate of Simaria was the lower of the two. In the Giridih subdivision there is an increase of 3·37 per cent. The largest gainer is Dumri (+18·22 per cent.), this being an area in which a number of new coal-mines have recently been opened. Dhanwar is also a gainer though only to the extent of 2·95 per cent.; this thana suffered less natural loss of population from 1918 to 1920 than any other in the district. The other three thanas are losers, but the only loss of any importance is one of 3·97 in Kharagdiha where the death-roll was heavy in 1919.

70. Immigration into Hazaribagh has fallen off slightly in the case of both sexes. In the case of the emigrants there is a marked difference: the

HAZARIBAGH.	1921.		1911.	
	Males.	Females.	Males.	Females.
Actual population	624,021	652,925	629,103	659,506
Immigrants	18,165	18,139	21,375	20,256
Emigrants	85,684	51,851	77,496	67,045
Natural population	561,502	599,637	585,224	700,296

number of female emigrants has decreased by over 5,000 while that of male emigrants has increased by over 8,000. This being so, it is difficult to account for the fact that the proportion of the sexes is almost the same as in 1911, there being now as then just over 104 females to every 100 males in the district. The migration within the district is also marked in the case of Hazaribagh. The industrial developments in the east tend to draw population in that direction and there are also circumstances at work in the western portion of the district which tend to accelerate the movement.

Interesting light on this tendency is thrown by Chapter II of the Hazaribagh Settlement Report. It is in the north-west of the district that the Bihari landlord has installed himself: it is here that the pressure of the population on the total and the cultivated area is greatest and it is here that the landlords have appropriated the greatest part of the land for themselves and reduced the status of the aboriginal cultivators. The economic motive for the aboriginals to emigrate from this area is therefore strong.

71. Between 1872 and 1891 when the first really reliable census was taken the recorded increase of population in Ranchi district amounted to 315,315 persons, of which the greater part occurred in the first decade. Between 1891 and 1901 there was an increase of 59,050 or 5·2 per cent.: of these ten years four were years of very deficient crops; in 1896 in particular there was considerable distress in

RANCHI.	Population, 1921.	PERCENTAGE OF VARIATION.	
		1911-1921.	1901-1911.
DISTRICT TOTAL ...	1,334,473	- 3·79	+ 16·81
Sadr Subdivision ...	495,043	- 5·84	+ 15·28
Lohardaga ...	37,712	- 9·95	+18·03
Kuru ...	23,304	- 9·60	+13·16
Burmu ...	23,176	+ 0·52	+ 5·30
Mandar ...	62,311	- 7·10	+ 7·59
Bero ...	36,194	- 9·02	+11·22
Lapung ...	23,875	+ 3·69	+13·71
Ranchi ...	161,009	- 2·45	+18·36
Ormanjhi ...	18,157	- 9·82	+15·26
Silli ...	36,308	- 8·52	+21·62
Angara ...	27,997	- 5·45	+14·73
Khunti Subdivision ...	317,843	- 9·09	+16·46
Karra ...	35,481	- 0·98	+15·50
Torpa ...	54,929	- 0·69	+11·50
Khunti ...	76,255	- 1·07	+14·03
Bundu ...	27,348	-17·18	+20·80
Sonahatu ...	35,208	-17·93	+13·85
Tamar ...	35,672	-16·42	+21·44
Gumla Subdivision ...	322,327	- 1·90	+16·71
Bishunpur ...	16,165	-10·90	+20·06
Chainpur ...	51,755	- 4·87	+17·29
Ghaghra ...	33,148	- 6·65	+10·63
Sesai ...	59,539	- 3·14	+14·91
Gumla ...	46,322	- 0·49	+22·29
Raidih ...	26,767	+ 2·24	+16·52
Falkot ...	27,133	+ 1·50	+14·00
Basia ...	61,448	+ 3·22	+19·67
Simdega Subdivision ...	199,260	+ 8·80	+22·38
Bano ...	32,958	+ 3·36	+20·93
Kolebira ...	50,892	+11·27	+22·19
Simdega ...	75,569	+ 8·37	+18·29
Kurdeg ...	39,811	+11·34	+32·84

the centre of the district, and the scarcity led indirectly to an increase of mortality thanks to the unwholesome diet of jungle fruits and roots unmixed with rice to which the people had recourse. The result of this series of bad years was to encourage the people in the habit of seeking work elsewhere and the number of emigrants, particularly of male emigrants, increased considerably above the number recorded in 1891. The thanas, specially Sesai and Karra, in which the famine had been worst and from which the flow of emigration had therefore been greatest suffered some loss; the thanas in the south of the district to which there had been some immigration from the north and in which the enumeration of 1891 had probably not been complete showed a striking increase. The period from 1901 to 1911 was an exceptionally prosperous one, the monsoon only failing in one year, 1907, and causing scarcity in the early months of 1908. The net excess of births over deaths for this decade amounted to 196,000 and when the census was taken every single thana in the district showed an increase of over 10 per cent. except Burmu (+5·30 per cent.) and Mandar (+7·59 per cent.). The increase over the population recorded in 1901 amounted in spite of a further increase in the number of emigrants to 199,640 or 16·81 per cent.

72. The year 1911 was unhealthy and there were numerous deaths from fever and dysentery, but the birth-rate was high (41·06 per mille) and remained high for the next six years. In 1912 the death-rate fell slightly and then continued to increase steadily until 1916 when there was a severe outbreak of cholera. Generally speaking however the years from 1911 to 1917 were years of prosperity: the crops were fair and the number of reported births was always well in excess of the deaths. In 1918 came the failure of rains and the influenza epidemic. The winter rice crop gave an outturn that was only 25 per cent. of the normal, and the price of rice which stood at 8 seers to the rupee at the beginning of September soon rose to 4 seers. Meanwhile

the influenza epidemic was raging in the district. The total number of deaths in 1918 was 82,000 (72,000 from fever) or 30,000 above the births, the death-rate from all causes being 59·3 per mille. In 1919 distress was general and the birth-rate which had been 37·2 per mille in 1918 fell to 25·1. Test works were opened in all subdivisions, but failed to attract workers. The railway in fact saved the situation; large quantities of rice and paddy were imported by this means and sold at controlled prices and many thousands of emigrants were taken away chiefly to Assam. But relief was required by that section of the community, the widowed, the infants or the old and infirm, who could neither shift for themselves at home nor emigrate. Food and cloth were distributed in many such cases and charitable relief of this description went on till the beginning of October 1919. Cholera was prevalent that year and the influenza continued to rage in the first months. The death-rate therefore was still above the normal and, as the birth-rate was abnormally low, the deaths exceeded the births by 18,000. The crops of 1919 and 1920 were good and by the time of the census the normal state of affairs was more or less restored. The reasons for the loss of population in Ranchi of 52,600 or 3·79 per cent. are not far to seek. The persons born in the district but enumerated outside it have reached the vast total of 348,000, which is more than a fifth of the natural and more than a quarter of the actual population: migration therefore completely explains the whole of the loss in the male population and about two-thirds in the loss of the female population. This loss has occurred in every subdivision except Simdega, from which it is natural to conclude that Simdega sends fewer recruits to the tea-gardens than do the others. It is most marked in the Bundu, Sonahatu and Tamar thanas of the Khunti subdivision where cholera and the influenza have been specially

RANCHI.	1921.		1911.	
	Males.	Females.	Males.	Females.
Actual population	658,501	675,882	676,526	710,547
Immigrants	11,820	15,682	17,168	16,475
Emigrants	181,085	167,137	160,188	145,121
Natural population	827,806	827,387	819,546	880,198

destructive. In the Gumla subdivision the loss has been greatest in the north-west; in the east and south there has been a small gain. In the Sadr subdivision there have been small gains in Burmu (+0·52 per cent.) and Lapung (+2·69 per cent.), but elsewhere a general decrease. The influenza has clearly left its mark in certain areas and has severely checked the growth of population. But the great increase of emigration has resulted in the census figures giving at first glance an unduly gloomy view of the situation.

73. As in the case of the Ranchi district of which it then formed a part, the increase recorded in Palamau district between 1872 and 1881 is in excess of the reality and cannot be accepted as genuine.

PALAMAU. Between 1881 and 1891, which was the first really reliable census, the increase was 8·3 per cent. and between 1891 and 1901 it was 3·8 per cent. : during the latter period two famines occurred, in 1897

PALAMAU.	Population, 1921.	PERCENTAGE OF VARIATION.	
		1911—1921.	1901—1911.
DISTRICT TOTAL	733,394	+6·84	+10·90
Balumath	67,459	- 7·47	+12·66
Daltonganj	185,448	+ 8·47	+18·88
Garhwa	121,938	+15·29	+15·48
Ranka	44,581	- 5·64	+30·80
Ghhatarpur	56,747	+16·67	+11·92
Patan	98,784	+ 7·98	+ 4·08
Husainabad	128,279	+16·00	- 7·65
Latchar	52,378	+ 0·63	+22·87
Mahadand	27,720	-14·04	+19·44

and 1900, and in 1900 the death-rate rose to 48 per mille owing to the prevalence of fever and an outbreak of cholera. Two thanas in the south-east of the district, Balumath and Latehar, showed a slight loss, but the others all showed an increase, especially those in the north of the district. Between 1901 and 1911 the population increased more rapidly again: the first six of these years were prosperous and during three of them the birth-rate stood

at over 50 per mille. In 1907 and 1908 the rainfall was deficient, poor harvests were reaped and there were outbreaks of cholera which affected the birth-rate in these two years and also in 1907. But the census showed an increase of 10.9 per cent. during the decade common to all thanas except Husainabad. The increase was greatest in the thanas of the south, this being probably due to the fact that in 1901 there had been considerable emigration from this area to escape the scarcity that then prevailed.

74. The birth-rate was higher in 1911 (53.45 per mille) than it has been since, but the death-rate (36.28 per mille) was also high owing to the ravages of malaria. In 1912 the rainfall was very short which greatly reduced the output of the crops, and there was an outbreak of cholera of some severity. In 1914 the crops were again affected but the public health remained fairly good till 1916, when the birth-rate fell slightly and the death-rate rose chiefly owing to the number of deaths from fever. The following year the birth-rate recovered itself and rose once more to over 50 per mille, the death-rate remaining about the same. The rainfall of 1918 was above the normal, but the distribution of it was fatal. The monsoon broke late and the time available for ploughing was so curtailed that the people in many cases sacrificed the *bhadai* for the *aghani* crops. The maize crop which is an important one in this district was washed away or irretrievably damaged by floods and such of the other *bhadai* crops as had been sown suffered a similar fate. In July floods occurred which completely upset all ideas that had obtained till then on the subject of high flood levels: by the middle of August the rains had practically stopped and by the middle of September they had stopped altogether. On the irrigated lands an average crop of winter rice was reaped, but on the unirrigated lands, which are for the most part in the possession of the smaller tenants, the crop was a failure while the absence of rain reduced the area sown with *rabi* crops to about half its normal size. Fortunately owing to the good crops of the preceding years and to the reserve of wealth that had been accumulating in the district owing to the abnormal prices that lac had recently been fetching, the scarcity did not amount to what was at one time anticipated. There was also a fine *mahua* crop which counts for a great deal in Palamau. Local distress was met by local charity and as compared with Sirguja and Mirzapur, which it adjoins, the district escaped lightly. The suffering caused by the influenza epidemic of this year was however unparalleled elsewhere in the province: the death-rate from fever alone rose to 59.2 per mille which was higher than the corresponding rate in any other district, and the death-rate from all causes to 71.7 per mille which was higher than that of any other district except Shahabad and Gaya. Cholera assisted to bring the total number of deaths up to 49,000, 14,000 in excess of the number of births. The mortality from cholera and fever was still high in 1919 and 1920 which were years of excessive rain and the birth-rate dropped from 50.2 in 1918 to 36.2 in 1919 and 38.4 in 1920. The total number of deaths that occurred in the decade was 247,000 which was 79,000 less than the number of births (326,000).

75. The census showed that the population of the district had increased by 45,684 or 6.64 per cent. since 1911. An increase occurred in every thana except Mahuadanr, Balumath and Ranka. These three thanas, with Latehar where there was an insignificant increase of population, occupy the south and are the most sparsely populated thanas in the district; Husainabad, Chhatarpur and Garhwa where the increase was heaviest occupy the north and north-west: Daltonganj and Patan, which with increases of 8.47 and 7.98 per cent., respectively, represented the mean, form the centre of the district. It is worth remarking that Ranka, Latehar and Mahuadanr were the heaviest gainers in 1911. In the case of Ranka where there was a decrease of 5.64 per cent., there is not much difficulty in diagnosing the cause: this thana suffered heavily from the influenza epidemic and to the end of the decade the number of deaths continued to be much in excess of the number of births: this is also the thana which supplied most of the emigrants who left the district for the tea-gardens. In the case of Mahuadanr where the loss amounted to

14·04 per cent. it is not so easy to diagnose. The District Officer reports that the decline here is probably due to the extreme unhealthiness of the area which is unquestionably the worst in the district and where influenza and endemic malaria have been most destructive. According to the number of reported births and deaths this thana was one of the most lightly afflicted during the last three years of the decade, but the thana contains a large area of reserve forest in which villages are scattered and remote and it is probable, particularly at a time like the influenza epidemic when the number of deaths is large and difficult to count and remember and when village chaukidars prove as liable to the ills of the flesh as any one else and unwilling to take long and lonely walks, that a large number of deaths went unreported. The density of population here is only 55 to the square mile. The thana also contains a number of *ghats* in which the worst types of malaria are prevalent and the depredations of wild animals militate against cultivation. It must finally be remembered that the population of the thana is small and that the actual loss represented by the rather formidable percentage of 14·04 was only 4,527, the population still standing higher than it did in 1901. Conditions are similar, only rather less so, in the adjoining thanas of Balumath and Latehar, the former of which shows a loss of 7·47 per cent. while the latter is practically stationary.

76. In Palamau, in contrast to Ranchi, emigration has decreased. In comparison with 1911, the number of immigrants has increased while that of emigrants has decreased, so that the district population loses less by migration than it did ten years ago. It is noteworthy that the female emigrants exceed the males in number, most of them being found in the neighbouring districts. Emigration of males does not take place from this district on a large scale because there is still ample scope for extended cultivation in the district; many of the labouring classes also are in the position of *kamias* or serfs who are not at liberty to move about at will, and communications also are undeveloped. All these factors militate against emigration. Yet in spite of the fact that there is still ample land waiting to be reclaimed for cultivation it is undoubtedly a fact that Palamau is an importing district :

PALAMAU.	1921.		1911.	
	Males.	Females.	Males.	Females.
Actual population	367,371	366,023	341,840	345,870
Immigrants	15,562	15,796	13,968	11,942
Emigrants	16,936	18,317	18,968	19,513
Natural population	368,795	369,044	346,820	352,441

“the area under cultivation does not produce sufficient food to support the population; the incidence of rent in proportion to the produce of the lands is higher than in any other district in the province and is certainly many times greater than in the adjacent districts of

Hazaribagh and Ranchi”. Again, “the landlords.....hold in their own possession.....a very much higher proportion than they hold in any other Chota Nagpur district. The explanation is undoubtedly to be found in the prevalence of the *begari* and *kamiauti* systems”.* The abolition of these systems by legislation and the increased security of tenure given by the recent settlement of the district are intended to improve the economic condition of the raiyat and as this result is attained there is every prospect that the population will increase in numbers also. Meanwhile talk of the construction of a fresh railway line and development of the local coal-fields point in the same direction.

77. Since the first census in 1872 the population of Manbhum district has increased by over 700,000, a record which is only beaten by Darbhanga with a population nearly twice as great. Between 1881 and 1891, the population of the district was characterized as “a prosperous people”, and in those days before the opening

* Paragraphs 4 and 5 of the review of the Palamau Settlement Report by the Director of Land Records.

MANBHUM.	Population, 1921.	PERCENTAGE OF VARIATION.	
		1911—1921.	1901—1911.
DISTRICT TOTAL ...	1,548,777	+ 0·08	+18·82
Sadr Subdivision ...	1,094,831	- 5·90	+13·59
Jhalda ...	104,961	-12·59	+16·57
Purulia ...	265,596	- 7·50	+15·30
Baghmundi ...	37,565	-17·75	+12·55
Chandil ...	100,715	- 8·23	+11·24
Barahabhum ...	141,829	- 1·51	+10·49
Manbazar ...	97,504	- 2·40	+16·05
Raghunathpur ...	132,932	+ 0·24	+10·58
Gaurandi ...	56,652	- 3·88	+11·13
Para ...	45,023	- 5·51	+12·01
Chas ...	112,054	- 4·99	+16·47
Dhanbad Subdivision ...	453,946	+18·18	+38·61
Gobindpur ...	44,957	- 0·20	+15·05
Jherria ...	180,072	+29·07	+73·83
Topchanchi ...	114,466	+22·17	+44·00
Nirsa ...	77,825	+12·11	+10·43
Tundi ...	36,596	+ 0·51	+18·51

considerably greater. Once started the development of the coal-field went on apace and the population of the northern subdivision increased by 38·61 per cent. between 1901 and 1911. Shortage of the rains in 1907 led to an outbreak of cholera which caused over 12,000 deaths in the coal-field in 1908, and but for this and for a slump in the coal trade which happened to follow it, the increase of population in this area would have been greater still. Except in 1907 the rains were good throughout the decade and with the assistance of a boom in the lac trade the people were thoroughly prosperous. The census of 1911 showed an increase in the population of every thana in the district, ranging from 73·83 per cent. in Jherria to 10·43 per cent. in Nirsa.

78. Except for the distress that occurred in 1918-19 the conditions of Manbhumi during the last decade may again be described as favourable. For the first three years the crops were good and for the next four they were fair. The renewed demand for lac for military purposes in connexion with the war was also a source of profit to a large section of the population, especially in the south of the district. In 1913 there was an epidemic of cholera and further epidemics of this disease occurred every year until 1919, the last being by far the most serious. In 1916 there was some distress in Manbazar and part of Purulia thana. In 1918 came the failure of the rains and the influenza epidemic. The outturn of the winter rice crop was only a third of the normal and distress amongst the agricultural population was general. Loans were distributed, but the problem of agricultural distress in this district is less acute than elsewhere because there is a remedy always available in the shape of a perennial and unsatisfied demand for labour in the coal-field. This was particularly the case in 1918-19 because the high price of coal made the coal owners anxious to raise all the coal they could, and to take all the labour they could get and pay it increased wages. Jamshedpur also is easily accessible and the habit of emigration to Assam is well established. In November and December the influenza epidemic swept through the district. The number of deaths reported in the year was 66,000 (42·2 per mille) or 20,000 in excess of the births. The epidemic continued in the following year and, with the addition of over 7,000 deaths from cholera, the number of deaths in 1919 was 65,000 or 30,000 in excess of the number of births, the birth-rate having fallen off as the result of the scarcity and epidemics of 1918 from 29·8 to 22·6 per mille. The birth-rate of Manbhumi is generally the lowest in the province and 1919 was no exception for 22·6 per mille was actually the lowest point reached in any district. The rice crop this year was a good one and 1920 saw a return to more or less normal conditions. The net result of the decade was an excess of 54,000 births (480,000) over deaths (426,000).

79. The census showed that the population of the district was stationary, there being an insignificant increase of 0·08 only. In the Sadr subdivision there was a decrease of 5·90 per cent. which was shared by all thanas except Raghunathpur and was most marked in Baghmundi (–17·75 per cent.), and Jhalda (–12·59 per cent.). Raghunathpur is close to the big railway centre of Adra; the locality is healthy and there is a flourishing cottage industry in the shape of tasar silk cultivation which helped the people through the difficult years of 1918 and 1919. Baghmundi and Jhalda are adjacent thanas: the former is a centre for blanket making and the latter for the manufacture of lac and iron implements. The local manufacture of blankets and iron implements on a small scale is dying out in face of the competition with factories which work on a large scale, and at the time of the census the lac industry was passing through a time of depression. It is probable therefore that a considerable part of the loss in these thanas was due to migration, which is specially heavy from Jhalda into the coal-field. The decrease in the Sadr subdivision was balanced by an increase of 18·18 per cent. in the smaller Dhanbad subdivision, the two rural thanas of which, Gobindpur and Tundi, remained about stationary, while the three thanas which contain the coal-field showed a great increase. Jherria and Topchanchi thanas, in which is situated the Jherria coal-field, showed increases of 29·07 and 22·17 per cent. respectively, while the Nirsa thana which contains the less important Mugma field showed an increase of 12·11 per cent. This increase was due entirely to the development of the coal industry, but it will be noticed that the increase is far less rapid than in the previous decade. The number of labourers employed in the mines at the time of the census was in fact less than usual; for the increased wages given had produced a result opposite to that desired and had led to a falling off in the attendance of labour and a decrease in the amount of coal raised, the miners who come and go finding that shorter hours provided all they required to maintain their modest standard of living.

80. Manbhum is one of the few districts in the province of which the actual population exceeds the natural population or in other words which

MANBHUM.	1921.		1911.	
	Males.	Females.	Males.	Females.
Actual population	799,405	749,372	788,587	759,039
Immigrants	95,221	58,103	82,606	60,170
Emigrants	54,449	63,224	50,465	65,027
Natural population	763,633	754,498	756,396	763,896

gains by migration. The migration of females shows little change from the previous census, though there is a slight decrease in volume in both directions. The number of male emigrants on the other hand has increased, while the flow of male immigration

has increased still further. In 1901 the flow of the stream was against the district: the emigrants exceeded the immigrants by nearly 74,000. By 1911 the tide had turned and was flowing strongly the other way and this census showed that this movement still continues with increased volume. The life of the Jherria coal-field is not likely to be a very long one, but with the development of industries and the increased demand for coal there is every prospect of a further increase of population in the next few years.

81. For the purposes of taking a census, Singhbhum is not an easy district and there is no doubt that the increase recorded in the decade of 1872

SINGHBHUM.

is much exaggerated. The rate of increase dropped to about half in the following decade when three of the four thanas showed a steady increase while Manoharpur, which was in 1891 the scene of urgent efforts to complete the last remaining gap in the main line of the Bengal-Nagpur Railway, showed a cent. per cent. increase. The completion of the railway resulted by the 1901 census in a 50 per cent. increase in the number of emigrants, chiefly to the tea districts, but, thanks to a prosperous and prolific population which is largely aboriginal, there was again an increase of 12·5 per cent. during the decade. Two years of scarcity were not sufficient to check agricultural prosperity between 1901

and 1911 and the rate of increase slightly quickened : in this period were first realized the vast potentialities of Singhbhum from an industrial point of view, owing to mineral resources which are yet destined to make the district one of the most important industrial centres in India. When the census of 1911 was taken the first blast furnaces at Jamshedpur were in course of erection and iron mines were already being worked in Dhalbhum and the Kolhan, as well as at Gurumahasini across the boundary of Mayurbhanj State. The census showed a general increase which was greatest in Manoharpur and Ghatsila and would have been greater still but for the further rapid development of the migratory habit.

82. Since 1911 the prosperity of this district was maintained till 1914 when the rainfall, especially in Kolhan, was deficient and untimely. Distress

SINGHBHUM.	Population, 1921	PERCENTAGE OF VARIATION.	
		1911-1921.	1901-1911.
DISTRICT TOTAL	759,438	+ 9.37	+13.77
Chakradharpur	119,531	- 2.33	+ 9.41
Ghatsila	316,426	+23.73	+16.10
Chaibasa (Kolhan)	278,263	+ 2.83	+ 8.69
Manoharpur	54,218	+ 1.83	+25.73

began to appear in September 1915 and as the monsoon of 1915 was also a failure famine relief operations were carried on from that month till November 1916. From May to September 1916 about 10,000 persons were employed daily on relief works and a considerable number were granted gratuitous relief. The acute distress was limited to the Kolhan. The harvest of 1916 was again below the normal, and relief works had again to be opened at five centres in the Kolhan in 1917. That year the monsoon was exceptionally favourable and bumper crops were reaped throughout the district. In 1918 Singhbhum suffered the general fate and the rains failed once more. Test works were opened in the Kolhan in the first quarter of 1919, but owing to the stoppage of the exports of rice and paddy and the sale of Government cloth, and owing perhaps above all to the demand for labour at high wages in the great industrial works now springing up in the district, the crisis was surmounted, and the distress was less acute than it had been from 1914 to 1917. Meanwhile the influenza epidemic raised the death-rate which had been 19.8 per mille in 1917 to 48.6 in 1918 and to 31.1 per mille in 1919. The birth-rate continued high from 1911 to 1915, the average for the five years being 34.0 per mille. It then fell in 1916 and 1917 as the result of the protracted distress. In 1918 it rose again in response to the prosperity of 1917 but fell once more in the last two years of the decade. The births exceeded the deaths in every year except in 1918 and 1919, the net excess for the whole ten years being 46,000.

83. The census showed that the population of this district had increased more than that of any other, the increase being 65,044 or 9.37 per cent. Chakradharpur thana showed a slight decrease, and Chaibasa and Manoharpur a slight increase. Ghatsila on the other hand showed an increase of no less than 23.73 per cent., as the result of industrial development. The town which has grown up round the works of the Tata Iron and Steel Company and which appeared in the census returns of 1911 as Sakchi with a population of 5,641 is now Jamshedpur with a population of 57,041. The site of these works was selected as lying close to the railway, approximately half way between the coal-field and the deposits of iron ore in Mayurbhanj. But the area in which it is situated is itself rich in mineral deposits and other industrial establishments such as that of the Cape Copper Company have also developed in the neighbourhood. "It is being proved", says the provincial Land Revenue Administration Report for 1918-19 "that the district contains very large mineral deposits of iron, manganese ore and copper, while gold, chromite, phosphoretic rock, phosphate of lime, yellow and red ochre, china clay, lime and lime-stone also occur and there are minor deposits of asbestos, mica, lead ore, soap-stone and slate which attract labour and capital and help in the opening up of the district". The deposits of iron ore in the

Saranda hills in the Kolhan are now recognized to be some of the finest in the world and they are already being worked on a large scale by the Bengal Iron and Steel Company and the Indian Iron and Steel Company. Everything in fact points to an immense development in the exploitation of the natural resources of this district in the next few years and this in turn must lead to a further great increase in the population. The future of the Hos and the other aboriginal races of the district in face of this great industrial development is a matter that offers scope for much speculation. At present they are independent agriculturists who, when there is nothing to be done in their fields, engage with great profit to themselves in unskilled or semi-skilled work of an industrial character. It may be that they will be able to maintain this position but, with the tendency towards increasing specialisation which is particularly strong in industry, it seems quite possible that an industrial class will gradually be formed whose traditional occupation will be employment

in subordinate capacities in the neighbouring works. Whether this adjustment can be made in the Kolhan without friction and without loss of the present sturdy independence of outlook which these people maintain is a matter of vital interest to the district.

SINGHBHUM.	1921.		1911.	
	Males.	Females.	Males.	Females.
Actual population	380,039	379,399	341,207	353,187
Immigrants	43,865	33,452	21,927	28,831
Emigrants	47,279	58,570	50,432	55,202
Natural population	388,465	399,517	370,612	379,556

Although the tide of migration has not yet definitely turned in this district, there seems every probability of its doing so in the next ten years. With a great demand for unskilled labour and high rates of wages at Jamshedpur and elsewhere the flow of emigration is falling off while the flow of immigration is rapidly increasing; the number of male immigrants has more than doubled since 1911, and the males are now more numerous than the females in the actual population. The industrial revolution of Singhbhum promises to be both rapid and dramatic, and, if this is so, there is every likelihood of a further great expansion of population in this district.

84. Over 90 per cent. of the increase of the population that has been recorded in the Santal Parganas since 1872 occurred before 1891 when the first reliable census was taken; in fact such were the difficulties of taking a census in those days in this district that an army of 4,500 men was required to prevent the general alarm excited by the prospect of being numbered from developing into an armed rebellion. The years from 1891 to 1901 were on the whole a period of prosperity and the increase of the population that occurred (+3·2 per cent.) and was fairly general throughout the district would have been much larger but for the great development of emigration, the number of emigrants having nearly doubled while the number of immigrants decreased. The main stream of emigration was then, and still is, towards the east, to the Barind and other parts of Bengal and to Assam. Between 1901 and 1911 there were three consecutive years of bad crops in 1905, 1906 and 1907, as the result of which the Dumka and Godda subdivisions were on the verge of famine in 1908 and were only saved by a good crop of lac. The recorded net excess of births over deaths for these ten years was 191,000 and the rate of growth of the population was again only prevented from being much higher than it actually was (+4·05 per cent.) by emigration. There were 5,000 less immigrants in the district in 1911 than in 1901 but the number of emigrants rose by 95,000 to 321,283. The increase occurred throughout the district except in Dumka and Godda, where the distress of 1908 had been most acute and from which there had been most emigration. The greatest increase was in the Rajmahal subdivision where plague had emptied the town of Sahibganj in 1901 and where in 1911 a large labour force was collected at the quarries from which stone was being supplied to the Sara bridge.

SANTAL PARGANAS.	Population, 1921.	PERCENTAGE OF VARIATION.	
		1911—1921.	1901—1911.
DISTRICT TOTAL	1,798,639	- 4.47	+ 4.05
Deoghar Subdivision	290,758	- 5.13	+ 3.05
Deoghar	135,330	- 6.88	+ 0.29
Madhupur	155,428	- 3.50	+ 5.67
Dumka Subdivision	395,135	- 4.89	- 0.20
Dumka	356,450	- 5.49	- 2.25
Dumka Damin	38,685	+ 0.05	+25.67
Godda Subdivision	361,098	- 6.73	- 0.81
Godda	258,102	- 6.04	- 4.72
Godda Damin	102,996	- 6.21	+10.67
Jamtara Subdivision	207,876	+ 0.91	+ 8.32
Jamtara	207,876	+ 0.91	+ 8.32
Rajmahal Subdivision	285,610	- 7.11	+12.05
Rajmahal	125,864	- 7.29	+19.48
Rajmahal Damin	162,146	- 6.97	+ 6.88
Pakaur Subdivision	255,762	- 0.73	+ 7.96
Pakaur	188,872	- 2.4	+10.64
Pakaur Damin	66,890	+ 4.2	+ 0.85

and prosperity reigned again by the end of the year. A severe outbreak of cholera occurred in 1916 which caused over 3,000 deaths and raised the death-rate to 30.1 per mille. The crops in this year and 1917 were normal, but the pinch of high prices of imported articles was beginning to be felt. The war indeed brought its own compensation to the Santal Parganas in the form of allotments to the families of men who had proceeded to the war areas in the various corps recruited in the district. Nevertheless, when the rains failed in 1918 and all the three principal crops were again affected, the people had little to fall back upon and were not in a state to resist the influenza epidemic. The prospects at the beginning of 1919 were therefore most gloomy, and it was not long before famine had to be declared in Deoghar, while in Dumka and Godda also the distress was acute. The maize crop promised well but was damaged by rain before it was reaped, but the deferred hope was realized when fine crops of autumn and winter rice were obtained which enabled all relief operations to be closed down. The influenza epidemic first broke out in 1918 when 60,000 of the 67,000 deaths that occurred were attributed to fever; in this year however the deaths only exceeded the births by a few hundreds. Things were worse in 1919 when there were 70,000 deaths from fever and the total number of deaths reported (82,000) was nearly twice the number of births, the death-rate being 43.8 per mille. The average birth-rate for the five years 1914—1918 was 33.8 per mille: in 1919 it fell to 22.8 per mille. In 1920 the crops were indifferent and prices were still high, so that the district had not returned to its normal state by the time the census was taken.

86. In spite of the fact that the net excess of births over deaths in the years 1911 and 1920 was 87,000, the census showed that the population of the district had decreased by almost that figure, to be exact by 84,142 or 4.47 per cent. In Jamtara there was an insignificant increase of 0.91 per cent. and in Pakaur the decrease of 0.73 per cent. was equally insignificant. These were the areas in which the scarcity with its train of epidemics had been less acute. Elsewhere the decrease was more and almost general, the heaviest occurring in Rajmahal subdivision (-7.11 per cent.). Here there was no longer the crowd of labourers hewing stones for the Sara bridge that there had been in 1911 and the population of Sahibganj town was less than

it would otherwise have been owing to an outbreak of plague just before the census which led the population to leave their houses. The thana of Rajmahal is still the most densely populated area in the district with 585 persons to the square mile and it is also a point from which the eastward emigration across the Ganges is easy. The Damin tracts, it will be noticed, have suffered less than the extra-Damin tracts. Migration has not affected the actual population to any marked extent in comparison with 1911. There is always a stream of emigrants of both sexes from this district towards the east, and it is still very great. It was less at the time of this census than it was at the previous census, but on the other hand the stream of immigration was less also. If these gains and losses are set against one another, it will be found that the Santal Parganas lost 2,000 males and 1,000 females by migration as compared with 1911: only a fraction therefore of the loss of actual population can be ascribed to this cause. The Santals are masters in

SANTAL PARGANAS.	1921.		1911.	
	Males.	Females.	Males.	Females.
Actual population	895,879	902,760	933,328	949,453
Immigrants	37,026	42,190	48,366	58,381
Emigrants	153,927	143,986	162,101	159,182
Natural population	1,011,880	1,004,556	1,047,063	1,050,304

the art of reclaiming land for cultivation, and having reclaimed what it paid them to reclaim in the Santal Parganas the statistics of emigration showed that they were moving further afield. It looks now as if this eastward stream had received a check. Whether this will

lead to a steady increase in density of population in the district which is now regarded as their home it is early days to prophesy. Subsidiary Table I shows that the percentage of net cultivated to cultivable land is higher here than in any other district in this Natural Division, and this suggests that the scope for an increased population of agriculturists is limited.

87. In Angul the census of 1901 showed an increase of 12·85 per cent. In 1900 there had been scarcity in the district, but comparatively speaking the decade had not been unfavourable in the Sadr subdivision and a number of settlers had moved in from the adjoining states. In the Khondmals relief operations had been necessary and the decrease was attributed to an outbreak of cholera in 1900 which was known to have caused great loss of life though detailed statistics were not available. The crops of 1902-03 were again short, but the district then enjoyed some years of prosperity till the short rainfall of 1907 led to scarcity and general, though not severe, distress in 1908. At the census of 1911 the increase of population was marked in the Khondmals, partly due in all probability to better enumeration, while the Sadr subdivision showed a slight decrease. The scarcity had been more severely felt in this subdivision and the habit of emigration had begun to grow, the emigrants for the first time exceeding the immigrants.

88. The crops in this district were below the average from 1911 to 1915. No record of vital statistics was kept before the year 1913, but the general health was fairly good till 1914. In that year the rains ceased early and insect pests also damaged the crops. As the stock of food-grains was already

ANGUL.	Population, 1921.	PERCENTAGE OF VARIATION.	
		1911-1921.	1901-1911.
DISTRICT TOTAL	182,574	- 3·48	+ 3·83
Sadr Subdivision	108,315	-12·51	- 1·83
Angul	108,315	-12·51	- 1·83
Khondmals Subdivision ...	74,259	+ 5·06	+15·58
Phulbani	74,259	+ 5·06	+15·58

short owing to the poorness of the harvests of the preceding years, prices rose and distress in 1915 was general and had to be met by the distribution of loans. There was a considerable amount of emigration this year and cholera and small-pox raised the death-rate amongst those who remained, the number of deaths being in excess of the births. The

effects of the distress were carried on into 1916 in the form of a low birth-rate.

but the crops of that year and of 1917 were excellent. Local prices fell, with the result that stocks had been reduced by heavy exports when the rains failed in 1918. That year the winter rice crop was only 28 per cent. of the normal and the general outturn of all crops was about 10 per cent. The people's anxiety became almost a panic and they emigrated in hundreds, largely to the tea gardens in Assam. Famine was declared in the Sadr subdivision; loans and gratuitous relief were given on a generous scale and the whole land revenue demand for the year was suspended. By this means and by financing the importation of rice from Cuttack and Sambalpur, the district was steered through the crisis until good crops in 1919 made it possible to stop the relief operations in October. During the period of scarcity virulent epidemics of influenza and cholera occurred and the number of deaths reported in 1919 was more than three times the number of births. The influenza epidemic was particularly severe in the Khondmals, the population of which was reduced by nearly 5 per cent. in three months. The scarcity however was not so much felt here as in the Sadr subdivision, the aboriginal population readily finding sustenance in the jungles of which the greater part of the subdivision consists. Of the ten years that have elapsed since the census of 1911 two were good from the agriculturist's point of view, one was bad and the rest were indifferent. The circumstances therefore were unfavourable to any growth of population and the vital statistics of the eight years for which they are available showed a net decrease of 5,000 from natural causes.

89. The census showed a decrease of 16,877 or 8.46 per cent. The population of the Khondmals was stationary. There is practically no emigration or immigration in this isolated tract and the very slight increase that there has been (+0.06 per cent.) represents the balance of natural increase left after the visitations of influenza and cholera. In the Sadr subdivision the decrease amounts to 13.51 per cent. This subdivision differs from the Khondmals in that the people now emigrate freely in bad years. It is interesting to note that in 1891 the number of immigrants was rather more than four times the number of emigrants. By 1901 the volume of emigration had nearly trebled and the proportion of immigrants was rather less. In 1911 the number of immigrants had decreased but the number of emigrants had

ANGUL.	1921.		1911.	
	Males.	Females.	Males.	Females.
Actual population	88,690	98,884	98,872	101,079
Immigrants	5,376	10,974	7,873	10,775
Emigrants	10,628	14,861	9,253	11,864
Natural population	93,942	97,771	99,752	102,168

increased more than three-fold and exceeded the number of immigrants. The marginal statement shows that emigration from Angul is still increasing, while immigration is still on the whole decreasing. At present there is little to attract immigrants into

Angul. Though the pressure on the soil is light, large areas of the district consist of hill and jungle and lack of facilities for irrigation and the prevalence of malaria militates against any rapid extension of cultivation in those tracts in which extension is still possible. Moreover, the law forbids the acquisition of land by foreigners. Immigrants at present come from the neighbouring states when things are bad, and there are a few sojourners, who come on business or to hold posts under Government for a few years. It seems probable, however, that with the development of the Talcher coal-field and the extension of the railway, the awakening of Angul is not far off, and it is quite possible that there may be a marked growth of population in parts of the Sadr subdivision by 1931.

90. The first reliable census taken in Sambalpur was that of 1891, when the increase recorded was 11.7 per cent. The increase in the next decade

SAMBALPUR.

amounted to 3.3 per cent. only, but it is remarkable that there should have been any increase at all, for in the famine of 1900, the year before the census, no less than 108 per mille of the population had perished, the area that suffered most being the south-west

of the district and specially the Borasambar zamindari. After this scourge the district had a period of rest and development: new villages sprang up and except for two years of capricious rainfall the crops were good throughout the next decade. The birth-rate was high and the death-rate was low; the excess of births over deaths amounted to 104,000, and in spite of adverse migration the census of 1911 showed an increase of 105,201 or 16·46 per cent. The increase occurred throughout the district and was most marked in the parts which had been most affected by the famine, the thanas in the south-west showing increases that varied from 27 to 70 per cent.

91. During the first seven years of the ten that have elapsed since that census, the crops were generally good, no unusual epidemics occurred and the birth-rate was well in excess of the death-rate. The former reached its highest point (46·7 per mille) in 1914 and the lowest death-rate (22·03 per mille) was recorded in 1911. In 1918 there was a sharp outbreak of cholera from which the district had had rest for some years, and the influenza epidemic

raised the deaths from fever to about three times the normal figure. The death-rate reached its highest point, 56·6 per mille, in this year and the number of reported deaths exceeded the number of reported births: all parts of the district suffered. In the following year there was another equally severe outbreak of cholera, but the worst of the influenza was over and the death-rate sank to 40·4 per mille. In the same year the birth-rate reached its lowest point (26·7 per mille) but it recovered itself to 37·4 per mille in the last year of the decade. The net excess of births over deaths for the whole decade was 62,000.

SAMBALPUR.	Population, 1921.	PERCENTAGE OF VARIATION.	
		1911—1921.	1901—1911.
DISTRICT TOTAL	789,466	+ 6·08	+16·46
Sadr Subdivision	303,719	+ 0·56	+10·07
Sambalpur	51,709	+ 2·25	+ 9·35
Jharsugra	41,944	+ 0·25	+12·03
Laikera	42,851	+ 4·45	+ 3·48
Mura	27,310	- 2·41	+ 7·83
Rampella	80,148	- 3·82	+13·18
Katarbagha	35,407	+ 2·61	+ 6·17
Sason	29,731	+ 2·90	+14·62
Dhama	28,975	- 3·82	+ 9·62
Mundher	15,544	- 0·74	+23·07
Bargarh Subdivision	485,747	+ 9·86	+21·27
Bargarh	55,834	+ 8·40	+16·07
Attabira	49,091	+ 0·44	+12·73
Sohela	39,757	+11·62	+23·79
Ambabhona	28,616	+ 9·14	+12·54
Padampur	38,496	+22·17	+27·07
Bheran	47,855	+ 2·29	+19·81
Bijapur	38,541	+15·49	+20·42
Melchhamunda	28,714	+11·90	+27·45
Gaislat	25,781	+11·06	+27·59
Jagdapur	28,728	+14·56	+42·48
Barpali	43,457	+ 9·88	+19·27
Phathi	41,218	+ 4·12	+17·50
Paikmal	24,649	+25·53	+70·21

Sambalpur suffered from the general failure of the rains in 1918 and the labouring classes and the smaller cultivators felt the pinch, as is shown by the fact that emigration to the tea gardens increased. In 1920 there was a severe flood which affected sixty villages, but caused practically no loss of human life.

92 The census showed a substantial increase of 6·08 per mille over the population enumerated in this district in 1911. The greater part of this occurred in the Bargarh subdivision where the rate of increase was 9·86 per cent. as compared with 0·56 per cent. only in Sadr. The reason for this difference is to be sought not in the fact that the epidemics of the last decade affected the two subdivisions in different degrees, but in the fact that there is more room for extension of cultivation in Bargarh. In Sadr most of the available land was taken up years ago, and what waste land still remains outside the reserve forests is either kept for grazing purposes or is too rocky to cultivate. In Bargarh on the other hand there was still plenty of land waiting to be reclaimed and the extension of cultivation in the last ten years has been marked and general. The population of all the thirteen thanas in Bargarh has increased, in seven cases by over 10 per cent. The heaviest increase is again in Paikmal (+25·53 per cent.) as it was in 1911 and lowest again in Attabira (+0·44 per cent.). In the Sadr subdivision all thanas showed an increase in 1911: on the present occasion four of them, Mundher, Dhama, Rampela and Mura, show a loss, which is in no case serious. The

reduced rate of increase as compared with the last decade is undoubtedly due to the influenza and cholera epidemics. Moreover such increase as there

SAMBALPUR.	1921.		1911.	
	Males.	Females.	Males.	Females.
Actual population	857,595	401,571	865,552	378,641
Immigrants	19,244	24,477	19,700	23,701
Emigrants	43,513	43,502	83,108	85,419
Natural population	412,164	425,596	433,960	440,359

is is due to variations in migration: it will be seen from the statement in the margin that the great falling off in the number of emigrants of both sexes more than accounts for the increase in the actual population, so that, while the actual population has increased, the natural population has decreased. Sambalpur therefore was more deeply affected by the epidemics than appears at first sight. The fact that 50 per cent. of the cultivable area of the district awaits cultivation suggests that the limit of population has not by any means been reached.

93. The earlier censuses in the Orissa Feudatory States were not reliable, but there is no reason to doubt that since 1872 there has been a great and steady increase in the population which has only received a check in the last decade. In three out

of the five decades for which figures are available the recorded increase has exceeded 500,000. Between 1891 and 1901, when emigration increased and immigration fell off, it fell to 274,686 or 9·48 per cent., all states sharing in the increase except Baud where disease, general unhealthiness and emigration on a large scale amongst the Khonds during the scarcity of 1900 produced a slight decline of 1·4 per cent. Otherwise the increase was well distributed amongst all the states, the largest gainer being Rairakhol (+32·29 per cent.), while Gangpur and Hindol each recorded an increase of over 20 per cent. In the following decade the rate of increase accelerated again to 19·64 per cent., and was general except in Dhenkanal (−1·27 per cent.) and the small state of Ranpur (−0·26 per cent.). The increase in Bonai was actually 52·33 per cent., in Patna 47·15 per cent. and in Athmallik 31·93. The greater part of this was undoubtedly due to the natural growth of a prolific population in a country where there is still ample room for expansion. Immigration also contributed; the construction of the main line of the Bengal-Nagpur Railway

ORISSA FEUDATORY STATES.	Population, 1921.	PERCENTAGE OF VARIATION.	
		1911—1921.	1901—1911.
TOTAL	3,807,172	+ 0·28	+19·64
Athgarh	42,351	− 9·53	+ 6·92
Talcher	51,015	−22·94	+ 9·55
Mayurbhanj	754,314	+ 3·44	+19·47
Nilgiri	65,222	− 5·08	+ 3·89
Keonjhar	379,496	+ 4·06	+27·63
Pal Lahara	23,789	− 7·86	+14·89
Dhenkanal	233,691	−13·60	− 1·27
Athmallik	69,749	+11·13	+31·93
Hindol	38,617	−22·52	+ 5·64
Narsinghpur	33,002	−17·42	+ 0·89
Baramba	33,630	− 6·76	+ 3·23
Tigiria	19,584	−15·95	+ 2·72
Khandpara	64,289	−12·61	+ 6·29
Nayagarh	122,842	−18·81	+ 7·47
Ranpur	41,232	−10·17	− 0·26
Daspalla	34,509	−39·51	+ 9·74
Baud	124,411	+ 9·67	+23·65
Baura	134,721	− 2·39	+11·86
Rairakhol	31,225	− 1·89	+18·00
Soanpur	226,751	+ 5·12	+28·97
Patna	494,456	+20·87	+47·15
Kalahandi	415,827	− 0·75	+19·52
Gangpur	809,271	+ 1·79	+27·18
Bonai	63,173	+16·93	+52·33

from the famine of 1900 the increase was rapid and also in the states of Gangpur and Bonai to the north-west which were specially affected by the coming of the railway; the phenomenal increase of 52·33 per cent. in Bonai must however be partly ascribed to the fact that the census was taken in a more efficient manner than in 1901.

across the north of the states and of the east coast section to the south brought them into more direct contact with the outside world and facilitated and encouraged immigration. It also made an outlet for the produce of the states; the prices obtainable for this produce rose while rents continued low, with the result that the economic inducement to immigration was strong and, as the census showed, effective. Two other branch lines were constructed in Mayurbhanj, the largest of the states, in this decade and the increase throughout this state and in Keonjhar which adjoins it was general. In the western states which were recovering

94. The story of the last decade as revealed at the census of 1921 is one of a greatly reduced rate of increase. For all the twenty-four Orissa States the net increase was 10,609 only or 0.28 per cent., no less than sixteen states showing an actual decrease. In the north eastern group of states which consist of the two large states of Mayurbhanj and Keonjhar and the small one of Nilgiri, the two larger have gained while Nilgiri has lost. One quarter of Mayurbhanj State consists of hills which it is impossible to cultivate and which are practically uninhabited. In the remaining area there is still ample room for growth of the agricultural population, while the hills contain great mineral wealth which must also attract population in due course. During three consecutive years 1913, 1914 and 1915 Mayurbhanj suffered from poor crops and it suffered again from the bad rains of 1918. Five of the ten years were unhealthy, 1918 being the worst when 17,000 persons died of influenza alone. Prices have risen, the price of common rice having doubled, and with them wages have risen also. The light railway in the south which connects Baripada, the capital of the state, with Rupsa on the Bengal-Nagpur Railway has been extended; in the north the state has a railway connexion with the iron mines at Gurumahasini. Although therefore the increase of population since 1911 (+3.44 per cent.) has not been so great as might have been expected this has been due to transitory causes; conditions all point to a further great development of population in the future. The same may be said of Keonjhar (+4.06 per cent.). Each of the three subdivisions of this state shows an increase, the increase being greatest in Champua in the north where population has been attracted by mining and timber-trading concerns and by the construction of the Amda-Jamda branch of the Bengal-Nagpur Railway across the border in Singhbhum. In this subdivision the growth of population is shared equally between the sexes; elsewhere the increase is an increase of the female sex which suggests that the men have been emigrating in large numbers since the troubles of 1918-19. Prices have risen but the readiness with which the people have been paying the assessment which was revised and increased in 1915-16 shows that the agricultural population is prosperous. As in Mayurbhanj there is still ample room for expansion of cultivation and like Mayurbhanj the state possesses great mineral wealth and is likely soon to have a railway. The decrease in Nilgiri (-5.08 per cent.) is ascribed entirely to malaria and to the influenza epidemic, which continued till 1921 and affected practically every village.

95. In the north western group of states are included Gangpur and Bonai which used formerly to be included in the Chota Nagpur Division. Gangpur shows a slight increase (+1.79 per cent.). The public health was good till 1918 when the influenza broke out, to be followed in 1919 by cholera and small-pox, and the crops were generally good except in 1918. There is a considerable emigration from this state to the tea gardens of Assam. The slight increase of population that has occurred is owing to the development of dolomite and lime-stone quarries in Rajganjpur and Raghunathpali while in the cultivated areas there has been a general though slight decrease, in spite of the fact that there is ample room for expansion of cultivation and that such extension is reported to be still going on. The smaller population of Bonai has increased more rapidly (+16.93 per cent.). Here there was no failure of rains worthy of notice. Cholera in 1915 and influenza in 1918 and 1919 caused many deaths but the inhabitants belong almost entirely to prolific aboriginal tribes and there is a considerable influx of cultivators from the districts of the Chota Nagpur Division to reclaim land for rice cultivation. The number of persons to the square mile in the state is still only 53.

96. The states of Bamra, Rairakhol, Sonpur, Patna and Kalahandi which were transferred from the Central Provinces in 1905 form the western group of states. Patna on this occasion shows a greater increase than any other state, the increase being 85,740 or 20.97 per cent. This rate is, it is true, less than

half the rate of the last decade, but Patna was then recovering from the famine of 1900. The increase is partly the result of natural growth, the net excess of reported births over reported deaths in the decade being 67,000. It is also partly the result of immigration, the conditions in Patna in the last three years of the decade having been relatively better than those in the neighbouring country. The greatest increase occurred in Sindhekela thana which is an open and accessible tract: the greatest decrease occurred in Patna Garh. The only other state in this group to show any increase was Sonpur (+5.12 per cent.), which was fortunate to escape with a normal rainfall in 1918. It did not however escape the influenza in that year, and cholera in 1912 and small-pox in 1916 also played havoc. Kalahandi, which after Mayurbhanj is the largest of the states in area and the third in point of population, showed a very slight decrease of 0.75 per cent. There was local scarcity here in 1919 and 1920, but there was no general or serious failure of crops. In 1918 influenza broke out and it broke out again in the hill tracts in 1919 when it synchronized with an epidemic of cholera, and raised the number of deaths to over 80 per mille of the population recorded in 1911. Kalahandi is a remote place, the capital being 140 miles from the nearest railway station. Members of the cultivating classes of the neighbouring districts in Madras and the Central Provinces occasionally cross the boundary and take up land here but migration is not and under present conditions is not likely to be on a large scale. There are still vast areas waiting to be brought under the plough and if the proposed railway line is constructed through the state facilitating immigration and the marketing of the crops which the state produces there must be a responding increase in the population. In Bamra famine occurred in 1918 and influenza occurred every year from then till the end of the decade. The population is scanty and there is much room for extension of cultivation: nevertheless emigration is freely resorted to, the Tata Iron and Steel Works at Jamshedpur in particular attracting a considerable number of temporary emigrants every winter. In Rairakhol the incidence of population to the square mile is even lighter, only 37, this state being the most scantily populated at all. Here the only calamity of the decade was the influenza epidemic of 1918, the population managing to tide over the scarcity that occurred at the same time by the consumption of their accumulated stocks. There is little migration but some of the lower classes find their way to Assam. Both the states showed a slight decrease, Bamra one of 2.39 and Rairakhol one of 1.59 per cent.

97. Athmallik, Baud, Talcher and Pal Lahara form the central group of states. Of these Athmallik is very sparsely populated and attracts immigrants on a considerable scale, with the result that its rate of increase is always high: on this occasion it was 11.13 per cent. The state suffered from small-pox in 1915, influenza in 1918, when the deaths were twice as numerous as the births, and influenza again and cholera in 1919. In 1918 the state hovered on the brink of famine and rice, which had been selling at 21 seers to the rupee in 1917, rose to 8 seers. The *rabi* crops of this state are famous and are largely exported down the Mahanadi which is the main artery of communication. The cultivated area has been slightly extended since 1911, but the population is only 82 to the square mile and there is still ample room for more. Baud is another sparsely populated state so that the increase of 9.67 per cent., which is only a third of the rate of the last decade, is slow. Malaria is always prevalent here and syphilis, and this decade was specially unhealthy owing to outbreaks of small-pox, influenza and cholera; such increase as there has been is therefore ascribed chiefly to immigration. Here, as in Pal Lahara there are vast areas of forest and the present population is no indication of the population which the natural resources of the state could bear: in Pal Lahara there was nevertheless a decrease during the decade of 7.36 per cent., owing to influenza and cholera in 1918 and 1919 and to emigration to Assam. In Talcher the decrease was on a much more serious scale, the loss amounting to nearly a quarter of the population (-22.94 per cent.). This state suffered from a series of short crops and epidemics. From 1912 to 1918 the rainfall was deficient and in 1915, 1916, 1918, and 1919 cholera, small-pox, chicken-pox and influenza caused many deaths: in five years of the decade deaths

were more numerous than births in the records maintained by the state, and in 1919 they were more than twice as numerous. Crops were also generally poor and the average price of rice was higher than in most of the states, the average for the decade being only nine seers. This indicates that the state is in closer touch with the general Indian market than some of its neighbours and it is probable that the relative facility of communication led to a considerable amount of emigration. The development of the Talcher coal-field and the consequent construction of a railway is likely to produce a marked effect upon the population ten years hence.

98. The last group of Orissa States consists of the ten states that lie in the south-east and are in fairly close touch with Cuttack and Puri,

SOUTH EASTERN STATES.

viz., Dhenkanal, Nayagarh, Athgarh, Hindol, Narsinghpur, Baramba, Tigiria, Khandpara, Ranpur and Daspalla. All of these are small except the two first mentioned, and every one of them shows a more or less marked decrease of population, the largest loss relative to its population having occurred in Daspalla which lost 22,544 persons or no less than 39·51 per cent. on the number of persons enumerated there in 1911. It is reported that in the earlier years of the decade there was every sign of the population having increased; new land was brought into cultivation, new villages were founded and the value of land rose. In 1914 and 1915 the rainfall was deficient; in the next two years it was in excess; in 1918 it was again deficient and in 1920 it was far below the normal although the year was marked by two floods on the Mahanadi at short intervals which produced a disastrous effect on the crops and on the public health. Cholera was raging in the state in 1919 and influenza in 1919 and 1920. The result was that the people had recourse to emigration, about 8,000 persons emigrating to Assam during the decade. A number of people also left the state as the result of the disturbances which occurred in 1914. The large state of Dhenkanal lost 36,484 or 13·5 per cent. of its population. The results of a three-anna crop and the influenza epidemic in 1918-19 led to emigration on a large scale: Cuttack is readily accessible from this state and emigration is easy. Nayagarh too lost through emigration, unskilled labourers being attracted by the much higher rate of wages obtainable elsewhere. The population also declined from natural causes; the number of recorded deaths was greater than the number of births for the last six years and the net excess of deaths for the whole ten years was over 9,000. The census showed a loss here of 28,451 or 18·81 per cent. The loss in the other states in this group varied from 6·76 per cent. in Baramba to 22·52 per cent. in Hindol, where small-pox and influenza depopulated whole villages. All these states suffered from the scarcity and epidemics of the last years of the decade, which caused loss of population both directly and also indirectly by encouraging emigration to Assam, Burma and elsewhere.

99. The marginal statement shows that immigrants are attracted into the states by the large areas still awaiting development and the comparatively

ORISSA FEUDATORY STATES.	1921.		1911.	
	Males.	Females.	Males.	Females.
Actual population	1,871,882	1,985,290	1,882,598	1,913,975
Immigrants	114,727	189,569	142,510	157,230
Emigrants	44,077	62,652	25,874	49,923
Natural population	1,801,232	1,853,873	1,766,452	1,805,663

easy terms on which land can be obtained. Although there has been a general falling off in migration, the immigrants are still greatly in excess of the emigrants. It will be noticed that the females are in excess in both streams, so that evidently a great part of the

emigration is connected with marriages across the border. Great developments, industrial and agricultural, seem to be ahead of the states, which must apparently lead to a great increase of population in due course.

100. Of the two Chota Nagpur States, Saraikela and Kharsawan, the former shows an increase of 5,398 or 4·92 per cent. and the latter a decrease of 1,547 or 3·98 per cent. Saraikela is close to the Tata Iron and Steel Works at Jamshedpur and access to the Jherria coal-field from Sini junction is very easy. Such

CHOTA NAGPUR STATES.

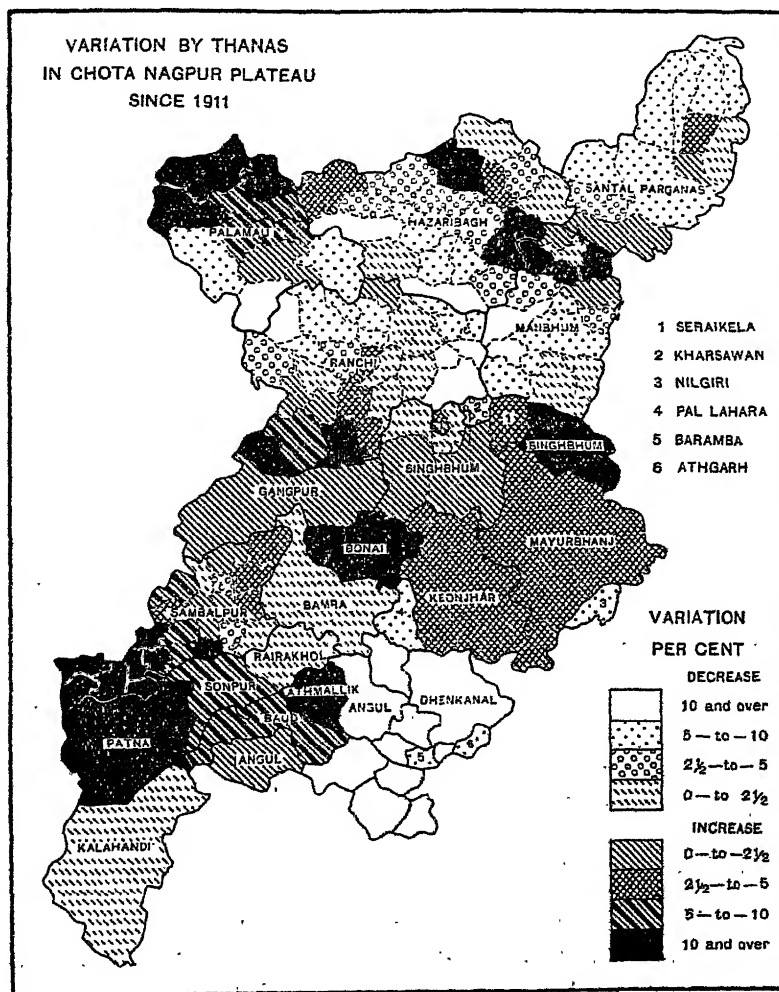
good wages are obtainable at these places that the population emigrates temporarily in large numbers every year and the level of wages in the state is very high. The state suffered from the general epidemics and prices rose, but it is clear that the population were not reduced to the same straits as in other less favourably situated tracts.

The slight decrease in Kharsawan calls for no

remarks. The population of this little state also emigrates freely to Jamshedpur in the hot weather in search of the high wages to be obtained there. In the Chota Nagpur States also the immigrants exceed the emigrants, but the figures call for no special remark.

CHOTA NAGPUR STATES.	Population, 1921.	PERCENTAGE OF VARIATION.	
		1911-1921.	1901-1911.
CHOTA NAGPUR STATES TOTAL.	152,497	+ 2.59	+ 5.36
Seraikela	115,192	+ 4.92	+ 5.03
Kharsawan	37,305	- 3.93	+ 6.83

101. In the Chota Nagpur Plateau there has been an increase in four districts and a decrease in four while both groups of states show unimportant increases. In Hazaribagh the population has decreased except in the industrial areas at Kodarma and in the Giridih subdivision, the decrease having occurred in those areas where the influenza and scarcity were



most felt. The loss in the whole district amounts only to 11,663 or 0.91 per cent. and migration more than accounts for the loss of males. In comparison with Ranchi the cultivators are poor and landlord-ridden in the north-west of the district and they have little encouragement to reclaim fresh land or to effect improvements in the land they already hold. Though rents are higher the people have not learnt to emigrate as they have

learnt in Ranchi; and they do not often get beyond the coal-field. There is

room for extension and improvement of cultivation and with the security given by the settlement which has been effected within the last ten years it is to be hoped that these results will follow. As they occur and as the important coal-fields of Karanpura and Bokharo Ramgarh are developed the population is bound to increase. The same remarks apply to Palamau. At the present census there has been an increase in the north of the district where the population is more dense and a decrease in the south where it is very thinly distributed. The decrease in the south is due to the influenza epidemic which was specially bad in this district and possibly also to migration within the district. The increase in the north is more difficult to explain. The great development of Garhwa as a centre of trade has caused the development in that neighbourhood, and Husainabad and Chhatarpur are on the railway, the former being the scene of the construction of a large cement works. It seems probable that access to the railway has supported these thanas through the bad years. If in spite of the difficulties of the last decade the population has managed to increase by 6.64 per cent., it is probable that it will increase much more in future as agricultural conditions and communications improve and the coal-fields of the district are developed. In Ranchi where the tenantry are in a much stronger position and more independent than in either of these two districts, there has been a loss of population of 3.79 per cent. which is however almost entirely accounted for by the phenomenal emigration. The Ranchi-born who were enumerated outside the district number over 25 per cent. of the population enumerated in the district. There was a large increase of population amounting to 8.80 per cent. in the south of the district in the Simdega subdivision: elsewhere the loss in the actual population was general and most marked in Khunti, where the influenza was bad. There does not seem here to be the immediate likelihood of the industrial awakening that is occurring in the surrounding districts, but it is the heart of Chota Nagpur and it is difficult to suppose that it will remain unaffected by what is going on all round it. In Manbhum the population has been stationary thanks to the coal-field, and would have increased but for the fact that the mines were working short handed at the time of the census. A large part of the Dhanbad subdivision is a net work of railway sidings and smoking chimneys, but the supplies of coal are not inexhaustible. It seems probable that the chief developments in this area in the near future will be an increase of deep workings and of labour-saving devices and, if so, it is improbable that the population will continue to increase as rapidly as in the past. Epidemics and emigration have caused a decrease in the population of the Sadr subdivision by 5.90 per cent., most marked in Baghmundi and Jhalda where it is probable that emigration was specially active owing to slumps in the local industries. Singhbhum in spite of prolonged scarcity shows a higher increase than any other district in the province, due entirely to industrial developments which have not only attracted immigrants but arrested emigration. The increase in the next ten years promises to be phenomenal as the immense natural wealth of this district is exploited. In the Santal Parganas there has been a loss amounting to 4.47 per cent. for which migration does not account. Pakaur and Jamtara where the scarcity was least felt show inconsiderable decreases but in all the other subdivisions there have been losses that vary from 4.89 in Dumka to 7.11 per cent. in Rajmahal. The Damini has escaped more lightly than the rest of the district. In Angul the Khondmals subdivision has a little more than held its ground, but there has been a severe loss of 13.51 per cent. in the Sadr subdivision where famine was declared in 1919 and resulted in a wholesale exodus of the population. Sambalpur on the other hand shows an increase; here the population of the Sadr subdivision is much what it was ten years ago, but there has been a big increase in the Bargarh subdivision owing to the fact that there are considerable areas of land still available for reclamation. On closer inspection it is found that the increase of population is entirely accounted for by decreased emigration, the natural population having decreased by over 4 per cent. In the states the variations of population are striking as they vary between an increase of 20.97 per cent. in Patna and a loss of no less than 39.51 per cent. in Daspalla. Nine of them have increased in population and seventeen have lost, but the increases in the nine slightly exceed the total losses so that

both groups of states show a slight increase. In the Orissa States there is still room for a vastly increased agricultural population. Many of the states also contain mineral wealth, which again must eventually mean increase of population. In North and South Bihar and Orissa population generally speaking seems to have reached its maximum, but in the Chota Nagpur Plateau there is every sign of the population eventually increasing to well above its present level. The area is inhabited largely by aboriginal races of a great fertility which is likely to be encouraged rather than repressed by economic conditions.

HOUSES.

102. Before the chapter is closed a few words may be added with regard to the number of houses in the province. The "house" is defined for census purposes as consisting of "the buildings, one or many, inhabited by one family, that is by a number of persons living and eating together in one mess with their resident dependants, such as mother, widowed sisters, younger brothers, etc., and their servants who reside in the house. In other words the unit is the commensal family and not the homestead or enclosure". The principle that the house is the commensal family was first introduced in 1891 and is now generally understood: it is commonly explained to the staff by saying that there are as many houses as there are *chulhas*. The commensal family is also the general basis of the *chaukidari* assessment and this led to some difficulties because certainly in one district people attempted to disguise the full number of units in order to avoid an increased assessment of the tax. Such cases were usually detected and it is improbable that this error caused any inaccuracy in the figures. In some parts of Bihar especially in Shahabad one family not infrequently has houses situated in different parts of the same village, in all of which persons are likely to be found sleeping at night time: in such cases the rule was that, if the various houses were situated in a single compound, they should be treated as one unit, but that every house that was not in the same compound should be treated as a separate unit. The rule was not strictly applied amongst the *Paharias* of the *Santal Parganas* either, for they have a custom whereby sons when they marry go to live in a separate house but continue to take their meals with their parents. In these cases the sons' houses also were treated as separate units. There are also various kinds of buildings of which the most important are hospitals, coolie lines, police lines, and so forth in which people live but in which there is no family life: in such cases every "house, apartment or ward" was treated as a separate unit.

103. The number of houses so defined was 7,490,955 or an increase of 48,751 over 1911 of which over 40,000 were added in the Orissa Feudatory States. Though there have been fluctuations in individual districts the figures show that at all events in British districts the definition was understood and applied in the same way as in 1911. The average number of persons per house in the province is now 5.0 or a shade less than in 1911. This average has been gradually falling from the first in every Natural Division which is accounted for in part on the present occasion by the decrease of population. More important however is the increase in the number of houses, a fact which lends some support to the view that the family now-a-days does not remain joint to the extent to which it did so formerly. This statement is often made, but unfortunately there are no statistics available on the subject. Families often effect partitions of their property without going near the courts. Again, settlement statistics of the number of holdings in a district are compiled from the point of view of the landlord and not of the tenant; if a tenant pays rent for his holding to two different landlords he is shown as in possession of two separate holdings: an increase in the number of recorded holdings does not therefore necessarily show an increase in the number of separate families. Moreover it is quite possible and usual for a family of cultivators which has separated for practical purposes to remain as a single unit in the landlord's books. Still less does the number of applications for opening separate land revenue accounts bear any relation to the number of

joint families which are in process of disruption. One can only proceed therefore on the basis of general impressions which are apt to be extremely unreliable. The truth would appear to be that there are two main groups into which such cases of disruption fall. In villages when the father of the family dies there are two contrary influences at work : on the one hand there is the fact that for the purposes of cultivation it is probably economical for the family to remain joint; the available labour if combined and organized will produce better results than if it is split up into a number of independent units. On the other hand it is not easy for a number of brothers and even less so for a number of sisters-in-law to live at peace with one another in the same household; quarrels for instance with regard to the distribution of jewellery may wreck the harmony of the best regulated establishments. It is probably true to say therefore that economic considerations tend to hold the family together in the case of cultivators while domestic considerations tend to cause it to fly apart and *a priori* there is no reason to suppose that the circumstances of these cases have shown any appreciable change in the last ten years or that disruption comes earlier than it used to. Allusions which are made to the tendency of joint families to break up appear to refer rather to a different class of case, in which younger sons of the upper classes go out into the world in increasing numbers to earn their livings and remit their savings to their homes where they leave their wives in charge of their fathers or elder brothers. In these cases the domestic motives which tend to disruption are as strong as in the former class of cases while the economic motives which tend to combination do not exist or are at least less strong. Moreover the younger son who earns his living entirely by his own efforts is likely to become more independent in outlook and more ready to set up an establishment of his own than one who lives at home. It is easy therefore to understand how the joint family may be tending to break up more rapidly amongst the professional classes. These classes are less numerous than the agricultural classes but they are better educated and more articulate. It is therefore easy to understand also that the process of disruption may be proceeding less rapidly than is sometimes supposed.'

APPENDIX TO CHAPTER I.

NOTE ON THE VITAL STATISTICS EXPERIMENT IN MUZAFFARPUR DISTRICT.

In their letter No. 1161—1169. dated June 23rd, 1914, the Government of India in the Education Department addressed all local Governments on the subject of obtaining reliable vital statistics for a small but typical area, and in pursuance of this suggestion the local Government made arrangements for a continuous record to be maintained for five years in a typical area in the Muzaffarpur thana of Muzaffarpur district containing a population of about 30,000 persons. The objects of the experiment were—

(1) to enable an accurate check to be maintained over the work of the reporting agency, *i.e.*, the village chaukidars and the police;

(2) to enable various correlations to be made (*e.g.*, sex of child with age of mother and fecundity of women at different ages), which would otherwise be impossible; and

(3) to provide a complete life history of the population under observation. The operations began with a census in March—April 1915, and the schedules then prepared were continuously maintained and checked by an annual census until 1920 when a final census (which began on April 21st) was taken and the operations brought to a class. The form of schedule in which the censuses were taken and the record was maintained contained the following columns :—

1. Number of house.
2. Serial number of person.
3. Name.
4. Status in family.
5. Religion.
6. Caste.
7. Sex.
8. Age.
9. Married, single, or widowed.
10. Subsequent births (with date).
11. Deaths—Date of.
12. Deaths—Cause of.
13. Permanent departures—Date of.
14. Permanent departures—Reason for.
15. New arrivals—Date of.
16. New arrivals—Reason for.
17. Remarks.

2. The work was originally placed in charge of three sub-assistant surgeons under the control of the Civil Surgeon of the district, and the intention was that they should constantly tour round their charges recording vital occurrences and incidentally affording medical relief. But after the experiment had been in progress for two years it was found that these three officers were working unsatisfactorily; they were not moving about their charges, they were not maintaining the record accurately and in fact they were found not to be entering in the schedules even such vital occurrences as they themselves reported to the Civil Surgeon. They were therefore replaced by three temporary sub-inspectors of vaccination and the Deputy Sanitary Commissioner of the North Bihar circle was directed to make monthly inspections. At the same time the medical relief was dropped. After being reorganized in this manner, the work was reported to be proceeding more satisfactorily so far as the actual record of vital statistics was concerned but the new staff were less qualified than the old to diagnose the cause of death and they suffered under equal disabilities in ascertaining the age of the population : apart from the fact that the people did not for the most part know their own ages or those of the members of their families, they also generally refused to

allow the staff to see their women-folk in order to judge their ages. At first an attempt was made to record the ages of the population afresh at each annual census, but this led to much confusion. It also threw an interesting sidelight on the reliability of the individual entries in the age column of the census schedules, for cases were frequent in which persons were recorded as being years younger than they had been recorded the year before. In order to prevent further confusion it was eventually decided to adhere throughout to the ages recorded by the sub-assistant surgeons at the original census of 1915.

3. The procedure followed at the sixth and final census in 1920 was as follows. The three sub-inspectors of vaccination were appointed supervisors and six outsiders were appointed as enumerators. This staff was provided with a new set of forms and a complete census was taken *de novo*. The results were then compared in detail with the record continuously maintained and enquiries were made regarding discrepancies under the directions of the Deputy Magistrate who had been selected as district census officer.

4. After all the schedules had been checked in this way they were sent to Patna where five statements were compiled as follows* :—

- (I) Population according to sex and religion at each age last birthday enumerated at the beginning of the quinquennium and at the end of each year of the quinquennium.
- (II) Deaths according to sex and religion at each age last birthday in each year of the quinquennium.
- (III) Deaths by months according to sex and religion in each year of the quinquennium.
- (IV) Births according to sex and religion with the age of the mother in each year of the quinquennium.
- (V) Births by months according to sex and religion in each year of the quinquennium.

5. As to the accuracy of the figures the Deputy Sanitary Commissioner writes: "It must be admitted that the scheme as worked out by the Census Commissioner was not and could not be carried into effect minutely and fully. The vital statistics had no doubt a more accurate check over the work of the reporting agency (the *chaukidar*) and would provide a good record of the life history of the population under observation, but, considering the discrepancies in the ages of the persons entered in the schedules, I doubt whether it would enable various combinations to be made, *e.g.*, the correlation of the sex of the child with the age of the mother and the fecundity of women at different ages." There can be no doubt that the Deputy Sanitary Commissioner's conclusion regarding the unreliability of the record of age is correct and that it is really impossible at present to obtain an accurate statement of the age distribution of a typical rural population in this province.

6. As to how far the figures in the statements give an accurate life history of the population in other respects some independent evidence is available.

(a) The population of the tract under observation as compiled from the schedules year by year was as follows :—

					Males.	Females.
1915	...	...	...	...	16,228	19,194
1916	...	...	...	...	16,115	18,888
1917	...	...	...	...	15,994	18,131
1918	...	...	...	...	15,900	17,843
1919	...	...	...	...	15,586	17,525
1920	...	...	...	...	15,464	17,366

The figures show an unbroken decline in the population of both sexes, amounting in the course of the five years to a total of 764 in the case of males and 1,828 in the case of females, or an annual average of 153 and 366.

* These statements were sent to the actuary with the Government of India.

respectively. According to this rate of decrease the population in 1921, when the general census of the population was taken, should have been somewhere in the neighbourhood of 15,000 males and 17,000 females but the figures actually recorded at the general census for this area were 13,811 males and 15,896 females. This sudden drop can hardly be ascribed wholly to inaccurate work on the part of the special staff, for the inaccurate recording of births counteracts the inaccurate recording of deaths. Nor is it likely that it is due entirely to omissions at the general census of 1921, though it must be admitted that such errors would tend to produce this result. A more probable explanation is as follows. The area is one in which the *rabi* crop, which is reaped in the months of March, April and May, is of special importance. The general census of 1921 was taken on the night of March 18th whereas the special censuses of the five preceding years had generally been taken towards the end of April. The labourers from this part of Bihar who emigrate in search of work in the cold weather usually return to harvest the *rabi* crop and they would be found at their homes in larger numbers at the end of April than in March. This fact might well explain a considerable decrease in the population in March 1921. Moreover, the year 1920-21 was a year of severe scarcity in Muzaffarpur, where the failure of the *hathiya* rain had severely affected the winter rice and restricted the sowings of the *rabi* crop. A comparison with the results of the general census does not therefore throw any serious doubt on the accuracy of the special or of the general census.

(b) A more serious difficulty is summarized in the following statement which compares the number of vital occurrences (i) recorded in the schedules by the special staff, (ii) reported by the police, who are the general reporting agency, and (iii) reported by the special staff to the Civil Surgeon :—

YEAR.	Recorded in the schedules.		Reported by police.		Reported by special staff.	
	Births.	Deaths.	Births.	Deaths.	Births.	Deaths.
1915-16	1,192	1,124	1,299	1,160	1,397	1,293
1916-17	1,037	972	1,259	1,090	1,307	1,165
1917-18	1,105	1,237	1,364	1,558	1,355	1,498
1918-19	993	1,465	1,072	1,609	1,148	1,689
1919-20	929	1,073	1,045	1,221	1,119	1,295
TOTAL	5,256	5,871	6,039	6,638	6,326	6,940

It will be seen that the number of vital occurrences reported by the special staff exceeded that reported by the police, as might have been expected, except in 1917-18 when the police reported a greater number both of births and of deaths. It will also be seen that the number of births and deaths reported by both these agencies invariably exceeded the number recorded in the schedules. It is this fact which is of interest in the present connexion and it is necessary to consider how the discrepancy can be explained.

7. It is difficult to suppose that the vital occurrences reported by the police were invented by them in order to satisfy an exacting superior officer or for any other reason : it may reasonably be assumed that the births and deaths which they reported in no case exceeded those that actually occurred. It is however possible that the persons who were born or died in the area under observation and whose births and deaths were reported merely happened to be there at the time and did not form part of the population habitually resident ("*population du droit*") to which alone the schedules were supposed to relate. But this can hardly account for more than a part of the difference. The only explanation that appears to be adequate to the facts is that the difference is principally to be accounted for by infant mortality. The special staff might easily hear from the chaukidar or independently of the birth or death of an infant which they would report but fail to enter in the schedules. At the time of the final census no trace would be found either in the schedules or in the villages of those infants which had been born and died in the quinquennium, and the relatives would not be likely to report such cases to the

enumerators. It is difficult on any other hypothesis to account for the fact that the divergence between the vital occurrences reported and those recorded in the schedules was not reconciled at the final census when the results of the different censuses were carefully compared.

8. From the above considerations it would therefore appear that too great reliance should not be placed on the results of this experiment. Of the three objects mentioned in paragraph 1 above with which it was made, the second has not been attained, while the first and third have been attained in part only. The reports of the special staff not only proved that the police were not reporting the full number of vital occurrences which took place, but they also indirectly improved the reporting of the police. "The effect of the check on the police returns" writes the Sanitary Commissioner in his annual report for the year 1917 "has been to increase these returns most markedly by almost 60 per cent. in the course of nearly three years". Similarly the life history of the population is incomplete if the above hypothesis, that a number of births and deaths have been omitted, is correct.

9. Finally, it may be added that, though the tract was selected on account of its normality, the five years during which the experiment was conducted were not normal years. The war, a period of scarcity and the influenza epidemic all assisted to make this period an exceptional one.

SUBSIDIARY TABLE I.—DENSITY, WATER-SUPPLY AND CROPS OF DISTRICTS.

(FOR BRITISH TERRITORY ONLY.)

DISTRICT AND NATURAL DIVISION.	Mean density per square mile in 1921.	PERCENTAGE OF TOTAL AREA—		PERCENTAGE TO CULTIVABLE AREA OF—		Percentage of gross cultivated area which is irrigated.	Normal rainfall.	PERCENTAGE OF GROSS CULTIVATED AREA UNDER—			
		Cultivable.	Net cultivated.	Net cultivated.	Double-cropped.			Rice.	Maize.	Other cereals and pulses.	Other crops.
1	2	3	4	5	6	7	8	9	10	11	12
BIHAR AND ORISSA ...	409	70.8	46.6	65.9	16.9	19.9	51.4	48.5	5.7	31.7	14.1
NORTH BIHAR ...	642	80.5	64.7	72.3	30.2	11.7	51.7	41.9	7.7	31.3	19.1
Saran ...	573	91.3	66.3	73.6	44.4	24.0	44.4	23.5	11.9	42.4	22.2
Champanan ...	550	83.2	64.2	73.6	22.4	2.6	53.2	41.2	7.8	35.1	12.8
Muzaffarpur ...	907	90.2	73.6	81.5	55.3	11.4	25.4	33.8	12.0	35.8	18.4
Darbhanga ...	870	91.9	78.8	85.7	81.2	4.7	50.3	47.0	5.7	34.6	22.1
Bhagalpur ...	451	89.0	58.2	64.7	22.2	13.9	45.0	45.0	0.5	34.9	12.7
Purnea ...	405	91.4	54.5	59.0	11.6	1.3	67.0	57.1	3.1	14.3	26.6
SOUTH BIHAR ...	502	77.1	53.9	71.6	20.2	40.9	43.5	32.0	5.3	32.3	10.4
Patna ...	763	85.5	62.3	73.9	29.0	57.6	43.0	23.1	5.3	55.9	7.7
Gaya ...	457	79.6	52.0	65.3	18.5	40.4	42.6	39.3	2.1	45.4	9.7
Shahabad ...	415	67.7	51.9	70.4	16.1	44.3	41.9	34.6	1.5	53.0	10.7
Monghyr ...	517	50.6	50.2	73.4	21.6	15.4	46.8	23.2	12.3	51.8	12.7
ORISSA ...	486	73.2	53.8	73.5	6.6	19.4	57.8	81.9	...	7.9	10.2
Cuttack ...	565	72.7	35.2	75.7	12.4	20.7	50.5	77.5	...	12.4	10.1
Balasore ...	470	77.6	39.6	70.8	0.3	5.5	53.9	90.3	...	1.7	7.3
Puri ...	382	70.3	47.1	67.0	3.3	37.0	55.1	51.3	...	6.0	12.2
CHOTA NAGPUR PLATEAU	221	56.8	31.0	54.6	3.9	12.1	52.6	60.7	5.1	23.1	11.1
Hazaribagh ...	122	35.3	20.3	57.3	6.1	3.7	50.4	43.7	8.3	29.7	13.4
Ranchi ...	188	69.1	34.9	50.6	0.8	0.2	55.3	60.6	1.2	28.2	13.0
Palamu ...	149	47.1	14.3	30.0	6.5	16.7	45.3	32.6	8.3	41.3	17.0
Manbhum ...	373	65.3	42.7	65.0	2.7	25.0	40.4	51.4	4.6	6.3	7.7
Singbhum ...	190	55.9	31.0	55.4	2.1	14.3	55.9	63.5	3.4	15.4	9.7
Santal Parganas ...	329	68.6	45.7	69.6	5.9	18.4	54.1	47.9	0.9	33.1	10.1
Angul ...	109	30.1	19.8	65.7	5.9	6.1	55.0	57.1	3.0	16.3	24.6
Sambalpur ...	208	73.4	36.7	50.6	0.9	11.1	55.1	54.5	0.1	7.9	7.5

SUBSIDIARY TABLE II.—VARIATION IN RELATION TO DENSITY SINCE 1872.

DISTRICT AND NATURAL DIVISION.	PERCENTAGE OF VARIATION: INCREASE (+) OR DECREASE (—).					NET VARIATION.	MEAN DENSITY PER SQUARE MILE.					
	1911-1921.	1901-1911.	1891-1901.	1881-1891.	1872-1881.		1921.	1911.	1901.	1891.	1881.	1872.
1	2	3	4	5	6	7	8	9	10	11	12	13
BIHAR AND ORISSA ...	- 1.2	+ 5.1	+ 1.8	+ 7.5	+ 18.4	+ 34.6	340	344	327	321	290	253
NORTH BIHAR ...	- 0.7	+ 1.9	+ 0.1	+ 5.9	+ 14.0	+ 22.4	642	646	634	633	598	524
Saran ...	+ 2.2	- 5.0	- 2.3	+ 7.4	+ 10.0	+ 12.7	573	553	508	510	555	714
Champanan ...	+ 1.7	+ 6.6	- 3.7	+ 8.0	+ 12.6	+ 34.7	550	540	507	537	488	408
Muzaffarpur ...	- 3.2	+ 3.2	+ 1.5	+ 5.0	+ 15.0	+ 22.6	907	937	905	864	851	740
Darbhanga ...	- 0.6	+ 6.6	+ 3.9	+ 6.5	+ 23.1	+ 26.3	870	875	870	837	786	638
Bhagalpur ...	- 4.9	+ 2.4	+ 2.8	+ 3.3	+ 7.9	- 11.4	451	506	494	431	468	433
Purnea ...	+ 1.8	+ 6.0	- 3.6	+ 5.3	+ 7.3	+ 17.9	405	398	378	390	370	343
SOUTH BIHAR ...	- 2.5	+ 0.7	- 3.6	+ 2.7	+ 10.9	+ 7.7	502	515	513	531	517	466
Patna ...	- 2.0	- 1.0	- 8.4	+ 0.9	+ 13.7	+ 1.2	763	779	788	858	850	754
Gaya ...	- 0.4	+ 4.8	- 3.7	+ 0.7	+ 9.1	+ 10.5	457	458	437	454	451	413
Shahabad ...	- 2.8	- 4.9	- 4.8	+ 5.7	+ 14.0	+ 6.3	415	437	440	471	443	391
Monghyr ...	- 4.9	+ 3.1	+ 1.6	+ 3.3	+ 5.5	+ 11.7	517	544	527	519	502	469
ORISSA ...	- 4.6	+ 0.9	+ 7.1	+ 6.8	+ 17.7	+ 20.6	486	508	504	471	441	374
Cuttack ...	- 3.1	+ 3.4	+ 6.5	+ 7.9	+ 16.3	+ 32.9	565	577	524	530	401	423
Balasore ...	- 7.1	- 1.7	+ 7.7	+ 5.3	+ 32.7	+ 27.0	470	508	515	478	454	370
Puri ...	- 7.0	+ 0.6	+ 7.6	+ 6.3	+ 15.4	+ 23.6	382	410	407	378	356	303
CHOTA NAGPUR PLATEAU	+ 0.1	+ 14.0	+ 6.4	+ 14.3	+ 34.1	+ 86.2	186	186	163	153	134	100
Hazaribagh ...	- 0.9	+ 9.4	+ 1.9	+ 5.4	+ 43.1	+ 65.4	122	184	188	166	157	110
Ranchi ...	- 3.8	+ 10.8	+ 5.2	+ 6.7	+ 30.1	+ 84.1	188	195	197	150	149	114
Palamu ...	+ 0.6	+ 10.9	+ 3.3	+ 8.3	+ 30.9	+ 72.9	149	140	126	121	113	66
Manbhum ...	+ 0.1	+ 18.9	+ 9.1	+ 12.8	+ 29.0	+ 85.8	373	373	314	288	255	193
Singbhum ...	+ 0.4	+ 12.2	+ 12.5	+ 20.2	+ 42.6	+ 135.7	190	179	168	141	117	82
Santal Parganas ...	- 4.5	+ 4.0	+ 3.2	+ 11.9	+ 24.5	+ 43.9	329	345	331	321	287	231
Angul ...	- 8.5	+ 3.9	+ 12.0	+ 5.7	+ 105.2	+ 133.0	109	119	114	101	96	47
Sambalpur ...	+ 6.1	+ 16.5	+ 3.3	+ 11.7	+ 25.8	+ 79.2	203	193	167	162	145	115
Orissa States ...	+ 0.3	+ 10.6	+ 9.5	+ 25.9	+ 41.1	+ 133.4	132	135	113	103	83	53
Chota Nagpur States ...	+ 2.6	+ 5.4	+ 9.1	+ 19.5	+ 19.8	+ 84.6	247	247	234	215	180	154

SUBSIDIARY TABLE III.—DISTRIBUTION OF THE POPULATION CLASSIFIED ACCORDING TO DENSITY.

[illegible]

SUBSIDIARY TABLE IV—VARIATION IN NATURAL POPULATION.

DISTRICT AND NATURAL DIVISION.	POPULATION IN 1921.				POPULATION IN 1911.				Variation per cent. (1911-1921) in natural population: increase (+) or decrease (-).
	Actual population.	Immigrants.	Emigrants.	Natural population.	Actual population.	Immigrants.	Emigrants.	Natural population.	
1	2	3	4	5	6	7	8	9	10
BIHAR AND ORISSA	37,961,838	422,244	1,054,793	39,404,407	38,435,293	419,712	1,916,766	39,902,287	- 1.0
NORTH BIHAR	14,007,646	267,914	475,744	14,312,476	14,103,314	310,517	582,513	14,374,310	- 1.1
Saran ...	2,329,683	44,739	29,400	2,565,107	2,290,778	47,604	284,501	2,527,045	- .9
Champaran ...	1,949,541	79,112	95,462	1,910,991	1,902,855	95,518	17,444	1,940,699	+ .9
Muzaffarpur ...	2,724,915	69,262	102,715	2,552,322	2,515,514	73,280	194,519	2,907,092	+ .9
Darbhanga ...	2,019,529	65,767	129,419	2,077,572	2,029,084	84,745	176,000	2,019,000	- 1.6
Bhagalpur ...	2,029,770	64,181	171,671	2,121,280	2,129,318	145,967	107,267	2,171,908	- .9
Purnea ...	2,024,698	264,691	27,529	1,844,368	1,689,637	109,869	89,445	1,829,216	+ 1.0
SOUTH BIHAR	7,574,003	134,067	577,394	8,017,330	7,767,682	158,371	645,604	8,254,915	- 2.9
Patna ...	1,571,257	61,012	122,914	1,621,199	1,609,631	61,106	173,915	1,601,440	- 4.2
Gaya ...	2,422,800	44,707	189,930	2,295,197	2,156,286	61,791	207,533	2,302,998	- .2
Shahabad ...	1,516,821	29,815	138,258	1,916,669	1,966,660	69,007	176,266	1,967,340	- 2.5
Monghyr ...	2,029,965	71,416	225,544	2,122,083	2,132,308	93,130	239,704	2,270,458	- 4.3
ORISSA	3,996,833	51,733	349,755	4,294,355	4,188,109	59,955	231,592	4,379,656	- 1.5
Cuttack ...	2,064,678	87,255	255,821	2,387,214	2,100,139	33,253	172,474	2,345,539	+ 1.7
Balasore ...	959,304	29,171	80,277	1,028,430	1,035,518	32,329	72,476	1,091,613	- 5.5
Puri ...	964,651	36,510	67,587	971,228	1,023,402	49,440	37,520	1,015,482	- 4.3
CHOTA NAGPUR PLATEAU	12,382,376	428,974	985,626	12,929,428	12,371,188	435,105	955,612	12,897,695	+ .3
Hazaribagh ...	1,270,904	26,505	147,505	1,355,174	1,287,000	11,041	144,331	1,391,316	- .3
Ranchi ...	1,334,573	27,433	348,172	1,655,196	1,287,510	73,641	506,590	1,650,182	- .2
Palamau ...	733,894	81,355	34,803	737,830	687,267	25,900	57,811	700,818	+ 5.6
Manbhum ...	1,348,777	133,222	117,073	1,331,124	1,547,575	142,776	115,462	1,550,393	- .5
Singbhum ...	750,438	77,317	109,829	722,970	1,045,504	49,586	105,662	750,170	+ 4.4
Santal Parganas ...	1,748,039	60,119	207,018	2,016,439	1,839,673	10,007	321,293	2,007,539	- 3.9
Angul ...	153,373	16,380	27,830	161,713	190,451	18,848	31,117	200,290	- 5.1
Sambalpur ...	780,901	39,721	99,115	827,719	774,193	43,911	173,537	844,319	- 4.2
Orissa States ...	3,607,172	264,206	106,729	3,865,095	3,796,563	290,749	75,207	3,579,190	+ 2.4
Chota Nagpur States ...	152,397	9,210	2,449	147,738	148,626	18,738	1,338	151,791	+ 10.6

SUBSIDIARY TABLE V.—COMPARISON WITH VITAL STATISTICS.

DISTRICT AND NATURAL DIVISION.	IN 1911-1920. TOTAL NUMBER OF—		NUMBER PER CENT OF POPULATION IN 1911 OF—		EXCESS (+) OR DEFICIENCY (-) OF BIRTHS OVER DEATHS		INCREASE (+) OR DECREASE (-) OF POPULATION OF 1921 COMPARED WITH 1911.	
	Births.	Deaths.	Births.	Deaths.	Actual number.	Proportional figures.	Natural population.	Actual population.
1	2	3	4	5	6	7	8	9
BIHAR AND ORISSA	13,348,461	12,104,908	34.73	31.49	+1,243,553	+ 3.24	- 407,881	- 497,375
NORTH BIHAR	5,486,189	4,931,622	38.91	35.33	+ 554,567	+ 3.58	- 158,324	- 94,320
Saran ...	993,585	804,454	49.41	39.77	+ 189,131	+ 4.24	- 31,038	+ 50,578
Champaran ...	772,748	648,323	49.49	33.98	+ 124,425	+ 6.31	+ 64,193	+ 32,475
Muzaffarpur ...	1,128,958	1,045,659	39.67	33.74	+ 83,299	+ 2.90	- 114,714	+ 91,529
Darbhanga ...	1,111,417	1,016,006	38.29	34.68	+ 105,409	+ 3.90	- 47,438	- 14,138
Bhagalpur ...	804,744	727,571	37.03	34.00	+ 77,233	+ 3.63	- 60,068	+ 105,543
Purnea ...	689,439	649,677	33.39	33.65	+ 14,763	+ 0.74	+ 10,133	+ 34,971
SOUTH BIHAR	3,245,940	3,029,883	41.79	39.00	+ 216,057	+ 2.79	- 237,585	- 193,679
Patna ...	635,351	630,034	39.65	39.23	+ 5,317	+ 0.32	- 70,351	- 31,735
Gaya ...	981,834	833,094	44.64	38.69	+ 148,740	+ 6.05	- 4,476	- 8,691
Shahabad ...	790,838	775,831	42.30	41.68	+ 15,197	+ 0.81	- 65,483	- 45,839
Monghyr ...	855,037	750,224	49.04	37.61	+ 94,803	+ 3.03	- 97,365	- 105,035
ORISSA	1,561,881	1,551,289	37.28	37.04	+ 10,592	+ 0.24	- 65,801	- 191,376
Cuttack ...	820,138	750,824	39.17	36.01	+ 69,314	+ 3.18	+ 33,655	- 44,491
Balasore ...	365,850	366,340	34.66	37.54	- 489	- 2.58	- 80,006	- 75,094
Puri ...	309,343	305,425	36.00	38.65	- 3,082	- 2.58	- 44,054	- 71,761
CHOTA NAGPUR PLATEAU	3,054,981	2,542,114	24.68	20.53	+ 512,837	+ 4.15	+ 31,733	- 8,080
Hazaribagh ...	542,408	454,878	43.09	35.27	+ 87,530	+ 6.23	- 3,243	- 11,663
Ranchi ...	533,575	419,980	37.74	30.27	+ 113,595	+ 7.47	- 3,989	- 53,600
Palamau ...	326,418	246,302	47.46	36.91	+ 80,116	+ 11.55	- 39,021	+ 45,624
Manbhum ...	479,905	426,392	31.01	27.55	+ 53,513	+ 6.49	- 7,166	+ 1,271
Singbhum ...	218,323	173,836	31.67	24.63	+ 44,487	+ 6.74	- 32,800	+ 86,044
Santal Parganas ...	620,647	533,818	33.95	28.33	+ 86,829	+ 4.93	- 61,195	- 84,149
Angul ...	61,234	57,680	36.68	28.95	+ 3,554	+ 3.27	- 10,297	- 16,877
Sambalpur ...	291,694	230,213	39.13	30.93	+ 61,481	+ 8.25	- 30,559	+ 45,273

NOTE.—The figures in columns 4 and 5 of Subsidiary Table IV for Bihar and Orissa include 37,513 persons who returned their birthplace as Bihar and Orissa without further specification. The figures for Orissa include 103 persons who returned their birthplace simply as Orissa and those for the Chota Nagpur Plateau include 374 persons whose birthplace was returned either as Chota Nagpur or as Bihar and Orissa States. These figures are not included in those of individual districts.

SUBSIDIARY TABLE VI.—VARIATION BY THANAS CLASSIFIED ACCORDING TO DENSITY.
(a) ACTUAL VARIATION.

NATURAL DIVISION.	DECADE.	VARIATION IN THANAS WITH A POPULATION PER SQUARE MILE AT COMMENCEMENT OF DECADE OF—							
		Under 150.	150—300.	300—450.	450—600.	600—750.	750—900.	900—1,050.	1,050 and over.
1	2	3	4	5	6	7	8	9	10
BIHAR AND ORISSA ...	1901—1911	+ 750,550	+ 636,611	+ 363,633	+ 138,600	— 11,016	+ 10,530	+ 23,245	— 36,111
	1911—1921	+ 9,130	+ 55,108	— 174,000	— 215,947	+ 5,310	— 50,919	— 77,811	— 16,994
North Bihar	1901—1911	...	+ 77,058	+ 95,238	+ 55,903	+ 34,037	— 10,374	+ 27,753	— 13,705
	1911—1921	...	— 6,910	+ 42,610	— 88,502	+ 22,140	+ 21,104	— 71,408	— 13,393
South Bihar	1901—1911	...	+ 20,493	+ 22,707	+ 71,337	— 37,906	— 20,321	— 4,507	— 23,406
	1911—1921	...	— 5,610	— 38,460	— 50,350	— 47,604	— 64,310	— 8,730	— 3,801
Orissa	1901—1911	...	+ 4,793	— 7,426	— 534	— 7,057	+ 57,155	...	...
	1911—1921	...	— 13,099	— 84,026	— 43,305	— 30,440	— 28,020	— 3,007	...
Chota Nagpur Plateau	1901—1911	+ 750,550	+ 504,723	+ 351,860	+ 8,004	...	...	...	...
	1911—1921	+ 9,130	+ 70,730	— 105,087	— 38,330	+ 51,423	...	...	...

(b) PROPORTIONAL VARIATION.

NATURAL DIVISION.	DECADE.	VARIATION IN THANAS WITH A POPULATION PER SQUARE MILE AT COMMENCEMENT OF DECADE OF—							
		Under 150.	150—300.	300—450.	450—600.	600—750.	750—900.	900—1,050.	1,050 and over.
1	2	3	4	5	6	7	8	9	10
BIHAR AND ORISSA ...	1901—1911	+ 31'80	+ 8'07	+ 6'20	+ 3'02	— 0'20	+ 0'20	+ 0'40	— 4'58
	1911—1921	+ 0'32	+ 0'35	— 3'40	— 4'72	+ 0'11	— 1'04	— 1'50	— 1'30
North Bihar	1901—1911	...	+ 9'01	+ 7'68	+ 3'29	+ 1'00	— 0'37	+ 0'59	— 2'33
	1911—1921	...	— 3'18	+ 2'29	— 5'07	+ 1'14	+ 0'93	— 1'00	— 2'00
South Bihar	1901—1911	...	+ 0'85	+ 1'06	+ 4'30	— 1'85	— 1'07	— 1'30	— 7'39
	1911—1921	...	— 0'35	— 1'08	— 3'10	— 3'13	— 4'00	— 0'78	— 1'31
Orissa	1901—1911	...	+ 3'18	— 0'54	— 0'06	— 3'04	+ 3'02	...	...
	1911—1921	...	— 7'15	— 0'02	— 5'70	— 4'40	— 3'31	— 0'89	...
Chota Nagpur Plateau	1901—1911	+ 21'80	+ 10'14	+ 13'67	+ 2'10	...	...	...	...
	1911—1921	+ 0'33	+ 1'20	— 4'05	+ 0'82	+ 13'94	...	...	...

SUBSIDIARY TABLE VII.—PERSONS PER HOUSE AND HOUSES PER SQUARE MILE.

DISTRICT AND NATURAL DIVISION.	AVERAGE NUMBER OF PERSONS PER HOUSE.					AVERAGE NUMBER OF HOUSES PER SQUARE MILE.				
	1921.	1911.	1901.	1891.	1881.	1921.	1911.	1901.	1891.	1881.
1	2	3	4	5	6	7	8	9	10	11
BIHAR AND ORISSA ...	5'0	5'2	5'3	5'7	6'4	67	67	69	71	61
NORTH BIHAR ...	5'3	5'1	5'3	5'8	6'6	121	126	130	109	91
Saran	5'3	4'5	5'3	5'5	7'0	165	180	175	168	125
Champaran	5'4	5'6	5'7	6'2	6'1	102	98	90	84	80
Muzaffarpur	5'1	5'5	5'3	5'9	7'0	170	160	174	153	123
Darbhanga	5'1	4'9	5'0	6'1	7'3	170	179	173	137	109
Bhagalpur	5'2	5'3	5'5	5'8	6'1	163	90	91	88	75
Purnea	5'3	5'4	5'4	5'4	6'1	76	74	60	73	61
SOUTH BIHAR ...	5'1	5'2	5'3	5'8	6'6	99	98	97	93	78
Patna	5'1	5'3	5'3	5'8	6'6	150	146	150	140	134
Gaya	5'2	5'1	5'1	5'8	6'1	88	90	80	81	74
Shahabad	5'0	5'0	5'3	5'7	7'1	84	85	84	89	63
Monghyr	5'0	5'5	5'4	5'7	7'0	102	99	97	91	71
ORISSA ...	4'7	5'0	5'1	5'3	5'9	103	103	90	90	75
Cuttack	4'7	4'9	5'1	5'1	5'5	121	117	111	104	90
Balasore	4'8	5'0	5'0	5'4	5'9	86	102	88	89	78
Puri	4'8	5'0	4'8	5'3	7'0	83	83	90	72	53
CHOTA NAGPUR PLATEAU ...	4'9	5'2	5'3	5'7	5'9	38	36	31	34	30
Hazaribagh	4'9	5'7	5'3	5'0	5'0	37	33	32	28	26
Ranchi	5'2	5'6	5'3	5'0	5'0	38	35	32	32	24
Palamu	5'3	5'8	5'4	5'0	5'8	28	26	23	21	20
Manbhum	4'7	5'1	5'3	5'3	5'3	39	36	31	27	23
Singbhum	5'1	5'0	5'2	5'3	5'3	39	36	31	27	23
Santal Parganas	5'3	5'7	5'8	5'1	5'4	35	35	35	34	20
Angul	4'4	4'7	4'8	4'7	5'0	47	49	48	48	...
Sambalpur	4'4	4'6	4'7	4'7	5'0	38	37	38	38	...
Orissa States	4'8	5'1	5'1	...	...	45	45	45	...	...
Chota Nagpur States	5'3	4'9	6'0	...	...	...	...	...	...	...

SUBSIDIARY TABLE VIIA.—PERSONS PER HOUSE AND HOUSES PER SQUARE MILE IN CITIES.

CITIES.	AVERAGE NUMBER OF PERSONS PER HOUSE.				AVERAGE NUMBER OF HOUSES PER SQUARE MILE.			
	1921.	1911.	1901.	1891.	1921.	1911.	1901.	1891.
1	2	3	4	5	6	7	8	9
Patna	4'0	4'2	4'1	...	7,008	3,110	3,083	...
Gaya	4'3	4'2	5'0	...	8,445	1,494	1,782	...
Bhagalpur	5'2	5'3	5'2	...	6,283	1,556	1,619	...
Jamshedpur	3'9	...	...	...	2,284	...	...	...

CHAPTER II.

THE POPULATION OF CITIES, TOWNS AND VILLAGES.

For census purposes the province is divided into urban and rural areas, and statistics relating to these will be found in Imperial Tables I (area, houses and population), IV (towns classified by population with variation since 1872) and V (towns arranged territorially with population by religion). In addition to these four Subsidiary Tables are given at the end of this chapter which show respectively—

INTRODUCTORY.

- (1) the distribution of the population between towns and villages;
- (2) the number per mille of the total population and of each main religion who live in towns;
- (3) towns classified by population with variations at previous censuses and with the proportions of the urban population living in towns of each class; and lastly
- (4) the population of cities, showing the density, the proportion of the sexes and of the foreign born and the percentage of variation at previous censuses.

2. The urban area includes all municipalities and cantonments and other continuous collections of houses which are of a distinctively urban character, this character being indicated primarily by the non-agricultural or non-pastoral occupations of the inhabitants, though density of houses and historical associations were also considered in drawing up the list. The distinction between urban and rural is not an easy one to draw; the great majority of the rural area is indeed rural in the most unqualified sense, but the urban character of some of the urban units is not above suspicion and in some cases it is hard to decide whether a particular collection of houses should more correctly be treated as a large village or a small town. For the purposes of comparison however it is desirable to maintain continuity from one census to another and the classification of 1911 has therefore been followed except in the following cases. Phulwari in Patna district, Mirganj in Saran district and Ichak in Hazaribagh district which had a total population in 1911 of 16,579 have been excluded on the ground that they are really nothing but large villages with predominantly agricultural interests. On the other hand eight places with a total population of 60,113 have been included as towns which were not included in 1911. Of these Forbesganj in Purnea, Dhanbad in Manbhum and Chakradharpur in Singhbhum have been made municipalities since 1911. Jaynagar in Darbhanga is a centre of trans-frontier trade with Nepal, the importance of which has increased in the last ten years and is still increasing. Begusarai is a subdivisional headquarters and an important market in north Monghyr; Lakhisarai in south Monghyr at the junction of the "loop" and the "chord" lines of the East Indian Railway is a centre for the collection of food-grains which are despatched from there to Calcutta and the coal-field and for the distribution of such articles as kerosene oil and cloth which Calcutta sends up-country to south Bihar. Sherghati in Gaya district is a lac market of some importance and a place of historical associations, and Jharsuguda in Sambalpur is a railway and trade centre with a growing population and a strong Marwari community through which passes much of the trade of the north of Sambalpur district and of Gangpur State. In addition to the municipalities and cantonments twenty-five places in all have been treated as towns; these vary in size from Jamshedpur with 57,360 inhabitants to the subdivisional headquarters and ex-capital of Rajmahal, the population of

which is now only 3,454. Besides Jamshedpur four other of these twenty-five non-municipal towns contain a population of over 10,000 and four in addition to Rajmahal contain a population of less than 5,000; the population of the remainder lies between 5,000 and 10,000. Seven of these are subdivisional headquarters but most of them are trade or railway centres.

3. In certain cases municipalities are contiguous to areas which really form part of the non-rural unit, altogether they lie outside the municipal boundary. This is the case with the area of the New Capital at Patna, the cantonment at Dinapur, the old cantonment of Doranda at Ranchi now administered by the Doranda Administration Committee, and the railway settlements at Katihar, Dhanbad and Chakradharpur. In these cases the population of the outlying urban area has been included in the population of the municipality in Tables IV and V, but it has also been shown separately in italics beneath the combined total so that the population of both areas may be readily available.

4. Of the total number of 81 towns, four have been treated as "cities" or in other words statistics are exhibited separately for them in Table VII (age, sex and civil condition). Table VIII (education), and Table XVI (European and allied races and Anglo-Indians by race and age). Of these Patna, Gaya and Bhagalpur were so treated at the last census, while Jamshedpur, which has grown to its present size in the last ten years, is a new addition.

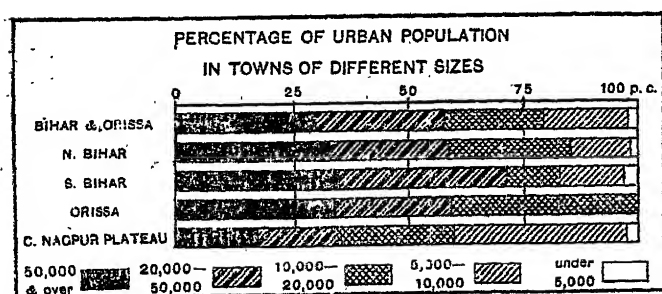
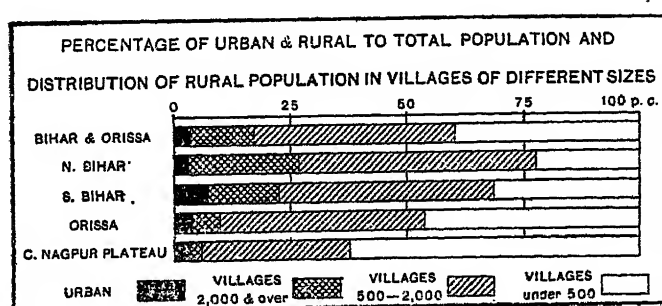
5. The population of the urban units is apt to be affected by temporary movements of the population. Such a movement occurred in Patna city in 1901 when some 19,000 persons fled from the town at census time because of the plague. A similar movement occurred in Gaya city at the last census, when plague was responsible for 20,000 people leaving the town. On the other hand the population of towns like Puri which are centres of pilgrimage is apt to be abnormally inflated by sudden incursions of pilgrims who come to attend one or other of the great festivals of the year. In 1901 over 17,000 persons were present in Puri on the night of the census; in 1911 the number of pilgrims present was less than that figure by not less than 10,000. At the present census these large movements were conspicuous for their absence. Patna and Gaya were singularly free from plague. In the town of Muzaffarpur some part of the large decrease that has occurred (10,913) was due to a displacement of population owing to an outbreak of plague and Sahibganj, which showed a loss of 2,903 was similarly affected for, although the subdivisional officer induced the local people who were camping outside the town to return temporarily in order to be enumerated, a large number of strangers left the town who would otherwise have been there on census night. Plague also caused some trouble in the enumeration of the towns of Daudnagar and Aurangabad in Gaya district, but the population was not seriously affected. At Puri the Dol Jatra festival was due to occur a few days after the census and in order to distinguish between the permanent and temporary population of the town the enumerators were instructed to write the word "jatri" in the schedules against the names of all pilgrims. The result was to show that only 1,368 male and 875 female or 2,243 pilgrims in all were present in the town on the census night. These figures were verified from two independent sources which both showed that the numbers of pilgrims who entered and left the town during the three days ending on March 18th were about equal, being approximately 2,500 in both cases. The number of pilgrims in the town was therefore obviously small and there is no reason to doubt the accuracy of the census figures. Owing to the scarcity obtaining in the neighbouring districts and states of the Central Provinces several thousands of temporary immigrants had found their way to Jamshedpur at the time of the census, where they were working or looking for work as unskilled labourers. Wages are high here and the rapid growth of the town was accompanied by building, road making and other similar operations which could absorb a large amount of

unskilled labour; in response to this demand a large number of men and women had moved into Jamshedpur from Chattisgarh. Table XI shows that 5,707 men and 4,884 women born in the Central Provinces were enumerated in the town. This accession of population was however discounted by other causes which have already been discussed and it is probable that the normal population of Jamshedpur was higher than that recorded. Apart from these cases no unusual migration of population to or from the towns was occurring at census time and the population of the urban area of the province may therefore be regarded as normal.

6. The population of Bihar and Orissa is predominantly rural in character. The following table shows the population living in urban and rural areas in the province, and in each administrative and Natural Division with proportions per mille:—

DIVISION.	POPULATION.			PROPORTION PER MILE.	
	Total.	Urban.	Rural.	Urban.	Rural.
BIHAR AND ORISSA ...	37,961,858	1,410,070	36,551,788	37	982
Administrative Divisions.					
Patna Division ...	5,544,038	432,866	5,111,172	78	922
Tirhut Division ...	9,949,268	260,376	9,688,892	26	974
Bhagalpur Division ...	7,886,982	270,811	7,616,171	34	966
Orissa Division ...	4,968,873	174,449	4,794,424	35	965
Chota Nagpur Division ...	5,653,028	236,263	5,416,765	42	958
Feudatory States ...	3,959,669	35,305	3,924,364	9	991
Natural Divisions.					
North Bihar ...	14,007,646	376,204	13,631,442	27	973
South Bihar ...	7,574,003	545,711	7,028,292	72	928
Orissa ...	3,996,833	150,542	3,846,291	38	962
Chota Nagpur Plateau ...	12,383,376	337,613	12,045,763	27	973

These figures are illustrated in the marginal diagrams, the first of which shows the proportion of urban and rural to the total population and the distribution of the rural population in villages of different sizes, while the second shows the distribution of the urban population in towns of different sizes. The state of affairs shown is in striking contrast with what obtains in the industrialized countries of the west where for instance in England and Wales no less than 793 per mille of the population are living in urban and only 207 in rural conditions. In Bihar and Orissa only 37 per mille, a mere fraction of the population, live in towns. Even as compared with other neighbouring provinces of India, Bihar and Orissa is unusually rural in



character. In Bengal 67 per mille of the population live in towns, in the Central Provinces 90, in the United Provinces 106 and in Madras 124.

TOWNS.

7. It cannot be said that the urban population of the province shows any marked signs of increasing. The following table shows that in the last thirty years the proportion per cent. of the total population which lives in towns has increased from 3·45 to 3·71 and that not steadily but in a manner that suggests (what is actually the case) that a large part of this increase is a matter of classification:—

VARIATION OF URBAN POPULATION.

DISTRIBUTION OF POPULATION IN GROUPS OF TOWNS ACCORDING TO SIZE AND IN RURAL AREAS (1891—1921).

CLASS OF AREA.	1921		1911		1901		1891		Per cent. of total population.			
	Number of Towns.	Population.	Number of Towns.	Population.	Number of Towns.	Population.	Number of Towns.	Population.	1921.	1911.	1901.	1891.
BIHAR AND ORISSA ...	...	37,981,858	...	38,434,753	...	36,557,354	...	35,904,618	100	100	100	100
(1) Towns ...	81	1,410,070	76	1,322,953	70	1,313,318	49	1,313,318	3·71	3·44	3·59	3·45
Class I 100,000 and over ...	1	119,976	1	136,153	1	184,785	1	165,192	·81	·86	·87	·46
Class II 50,000—100,000 ...	5	298,507	3	189,505	4	264,856	5	337,479	·70	·49	·72	·94
Class III 20,000—50,000 ...	12	402,270	14	471,944	13	413,252	11	372,280	1·06	1·23	1·14	1·04
Class IV 10,000—20,000 ...	22	307,279	20	274,514	20	276,813	20	278,853	·81	·71	·76	·78
Class V 5,000—10,000 ...	35	256,083	30	216,083	25	187,830	11	80,583	·87	·56	·51	·22
Class VI Under 5,000 ...	6	25,950	8	34,754	8	81,177	1	4,890	·07	·09	·09	·01
(2) Rural areas ...	...	36,551,788	...	37,111,800	...	35,244,036	...	34,665,341	96·29	96·56	96·41	96·55

To all intents and purposes the province is as predominantly rural now as it was in 1891. The only group of towns that shows anything like a steady progress is class V and it is in this group that most of the new towns find entrance.

8. But not only is the proportion of urban to rural population practically stationary; the population of most of the towns of the province considered individually is actually on the decrease. This is proved by the next table which shows the variation of the population of all towns treated as such at the last two censuses grouped according to the classification of 1921.

POPULATION OF GROUPS OF PLACES TREATED AS TOWNS IN 1911 AND 1921 AS CLASSIFIED IN 1921 WITH VARIATION.

CLASS OF TOWNS.	Number of towns.	POPULATION.		Increase (+) or decrease (−) 1921 over 1911.	
		1921.	1911.	Number.	Per cent.
Total of places treated as Towns in 1911 and 1921.	73	1,349,957	1,306,374	+43,583	+ 3·3
Class I 100,000 and over ...	1	119,976	136,153	−16,177	−11·9
Class II 50,000—100,000 ...	5	298,507	245,098	+53,409	+21·8
Class III 20,000—50,000 ...	12	402,270	400,661	+ 1,609	+ 0·4
Class IV 10,000—20,000 ...	20	284,533	285,072	− 439	− 0·2
Class V 5,000—10,000 ...	31	227,860	218,243	+ 9,617	+ 4·4
Class VI Under 5,000 ...	4	16,711	21,147	− 4,436	−21·0

The aggregate increase for all these towns, 43,583, is less than the increase in one of their number, *viz.* Jamshedpur, which has grown in ten years to more than ten times its former size and where the increase amounted to 51,688. The increase has occurred only in class II which includes Jamshedpur and thirty-three towns have increased in size while forty have decreased.

9. The number of towns is largest (29) in the Chota Nagpur Plateau where their average size is smallest (11,642) and smallest (6) in Orissa, when their average size is largest (25,090). The district

DISTRIBUTION OF TOWNS.

with the highest average population in its towns in Puri (38,694) but this means nothing except that Puri contains only one town and that above the average in size: Cuttack and Puri together contain over 50 per cent. of the urban population of Orissa and it is this fact that gives Orissa pride of place as regards average size of towns. South Bihar which comes next to Orissa is really by far the most urban of the Natural Divisions, as it contains 26 towns with an average population of 17,352. The proportion of the population living in urban conditions is highest in South Bihar (72 per mille), which contains Patna and Gaya, two of the three largest cities in the province, and a number of other towns which stand as witnesses to the river trade and the vanished administrations of a former day. If the increase in Gaya which is due entirely to the town being emptied by an epidemic of plague in 1911 be neglected and also the increase due to the inclusion of Sherghati, Lakhisarai and Begusarai as towns for the first time, the population of the towns in this division is decreasing.

NORTH BIHAR.

10. North Bihar is a land of large villages but few towns, there being in these six districts only 20 towns containing but 27 per mille of the population. In Saran, Chapra after losing population at the two previous censuses has at last turned the corner and shows an increase; the extent of the increase is negligible (+42), but the fact that there has been an increase at all is noteworthy and signifies that the plague is losing its grip on the town. The other two towns in the district each show a small decrease, though only a fraction of the decrease of the last census. The population of Siwan has fallen by 610 to 11,862 and that of Revelganj by 148 to 8,186. The latter used once to be a thriving trade centre commanding the river borne trade of the Gogra, but it has now fallen on bad times; it has gradually lost 39 per cent. of the 13,415 persons enumerated there in 1872, and the area of the municipality has recently been reduced.

11. Both towns in Champaran have lost ground; Motihari has lost 1,048 or 7.0 per cent., and Bettiah 1,502 or 5.8 per cent. The loss in Bettiah would not have been so great but for the fact that the Lieutenant-Governor and his staff were in camp there at census time in 1911 and people had come into the town to see the *tamasha*.

12. The towns of Muzaffarpur district have suffered more severely. Sitamarhi in the north shows a small increase (+410), but the three others have lost heavily, Muzaffarpur to the extent of 10,913 or 25 per cent., Hajipur to the extent of 2,463 or 12.8 per cent. and Lalganj to the extent of 1,926 or 21.2 per cent. These three towns lie within the area in which plague is endemic and some part of the heavy loss that has occurred in Muzaffarpur must be ascribed to an outbreak of plague at census time which displaced the population of the town. Hajipur and Lalganj have also suffered from numerous outbreaks of cholera, particularly in 1918.

13. Darbhanga boasts five towns, but three of them are very small. With the exception of Madhubani in the north where there is a very slight increase (+82) in keeping with the increase in the surrounding country-side and of Jaynagar which had not risen to the status of a town in 1911, all of them have lost population in the last decade. In Samastipur the loss amounts to 1,151, Roserha has lost 997 or 12.1 per cent., while Darbhanga has lost 8,928 or 14.3 per cent. The similarity between the variations of population in Muzaffarpur and Darbhanga districts has been pointed out in Chapter I: this similarity extends to the urban population also, Darbhanga reproducing the same variations as Muzaffarpur on a rather less marked scale. The only town in either district to show an increase is the headquarters station of the northern subdivision: all other towns have lost ground the loss being heaviest in both cases in the headquarters station of the district.

14. In Bhagalpur there are only two towns, one large and one small. The population of the small one, Colgong (5,413) is about the same as it was fifty years ago; between 1901—1911 there was a loss in population of 1,441 but this has been almost wiped out by a gain of 1,116 on the present occasion : situated on the "loop" line of the East Indian Railway and on the banks of the Ganges, Colgong maintains a certain importance as a trade centre for the north-east corner of Bhagalpur district and for the north-west corner of the Santal Parganas.

15. Bhagalpur like all the other large towns in the province except Jamshedpur and Gaya (where the increase is not real), is losing population.

CITY.	Females per 1,000 males.	PER MILE OF POPULATION.		
		Hindus	Muham- madans.	No. of per- sons born outside district.
Patna	824	752	235	161
Gaya	810	776	215	97
Bhagalpur	851	710	282	75
Jamshedpur	621	791	129	722

Here the loss amounts to 5,471 or 7·4 per cent. The marginal statement compares the four cities in certain respects : the high proportion of females and of Muhammadans as well as of the native-born will be noticed in the case of Bhagalpur. As these figures indicate, Bhagalpur is no industrial centre attracting male workers from other districts : it is a country town

the chief industry of which, silk weaving, is a cottage industry and like other country towns in Bihar it has suffered loss of population in the distress and epidemics of the last few years.

16. In Purnea, the headquarters station is a decadent town. Buchanan Hamilton drew a parallel between the town of Purnea and the city of London but this holds no longer. While the population of the district as a whole has been increasing steadily, that of the town has been decreasing and is to-day only 14,102, which is less than it was fifty years ago. Kishanganj, the centre of the jute trade in this district, would grow more rapidly but for its extreme unhealthiness : actually it shows an increase of 371 only. Katihar at the junction of the Bengal and North-Western and the Eastern Bengal Railways is a rising town; it came into existence as a railway settlement and was first treated as a town twenty years ago. With the development of Purnea district and of the trans-frontier trade with Nepal, Katihar, which is the focus of the whole of the railway system of the district, is rapidly increasing in importance and various industries are springing up in the town for working up the raw materials which pass through it before export. The materials come not only from the district itself and Nepal but also from the neighbouring districts of Bengal. This growing importance is reflected in an increase of 4,314 or 42·2 per cent. in the population.

SOUTH BIHAR.

17. In South Bihar the urban element is more important. Patna which is the largest city and has now become the capital of the province is the home of the petty trader and artizan. The town consists chiefly of one long street and from Bankipore at the west of the furthest boundary of Patna City at the east both sides of this street are occupied, with occasional interruptions in the shape of public institutions, private dwelling houses or cultivated fields, by an endless succession of small shops. The other streets of the city are similar in character, with considerable areas of cultivated land here and there; in fact so small are most of the buildings and so extensive is the cultivation that the traveller by rail from Patna City to Patna Junction has some difficulty in realising that he is passing along the boundary of a city containing over 100,000 inhabitants. A note kindly supplied by Professor Hamilton of Patna College on an economic census of the main street of Patna taken by the student members of the Chanakya Society during the autumn of 1920 and

spring of 1921 forms an appendix to this chapter. The strongest impression produced by the note is of the petty scale of the economic enterprises of the city. Out of the 1,443 units investigated nine only are wholesale dealers pure and simple, but a certain proportion of the retail vendors are wholesale dealers on a small scale in so far as they sell also to other shops. A large proportion of the shops (586), particularly in the case of sweetmeat makers and tailors, were found to be owned by small independent producers who are workmen first and shopkeepers afterwards and it was also found that a surprisingly high percentage of the shops are of very recent origin. The most common type of retail shop is that of the seller of tobacco, betel and aerated water (26); then come cloth dealers (97), grocers (96), and purveyors of stationery and other requirements of the student class (80). The marginal statement shows

AGRICULTURE AND MARKET GARDENING.			
(Groups 1—7.)			
26,373	...	...	22.0 per cent.
INDUSTRY.			
(Groups 25—103.)			
22,708	...	...	18.9 per cent.
TRADE.			
(Groups 121—154.)			
21,854	...	...	18.2 per cent.
PROFESSIONS AND LIBERAL ARTS.			
(Groups 165—179.)			
7,339	...	...	6.1 per cent.

the number of persons in Patna and their percentage to the total population of the city who are engaged in or dependent on some of the principal forms of occupation. These occupations will be discussed in greater detail in Chapter XII, but a few general observations with regard to them may be made at this point *apropos* of the decrease of population in the city. The outstanding feature of the industries of Patna is that they are on a petty scale. In the whole of the city there were only 15 industrial establishments of a sufficient size (*i.e.*, employing 10 persons or more) to be treated as such for the purposes of the census and the number of persons employed in all of them together was less than a thousand. The other persons

engaged in industries in the town are engaged in hand industries and many of them do piece-work for money-lending traders who thus have the controlling interest. A typical industry which employs some 1,500 persons chiefly women is the manufacture of *tikulis*, thin ornaments of glass or foil varying in size from a two anna bit to a rupee; these are worn between the eyes chiefly by Hindu women of the lower castes and female Muhammadan children and are particularly favoured in the Tirhut Division. No great skill is required for this industry and the workers get 6 annas to Re. 1 a hundred for them. This industry is still prospering because the breath of competition has not yet been breathed upon it. Others are less fortunate. "Better glass-ware and copper and brass utensils are made in the Punjab and the United Provinces. Local embroidery is considered no match for that of Lucknow and Benares".* So the industries of Patna, conducted to-day for the most part on the same primitive lines as they were conducted a hundred years ago, at present show signs of failing as their product comes into competition with the output of other places. So also with the trade of the town. The location of Pataliputra at the junction of the Ganges and the Son and near the junction of the Ganges with the Gogra and Gandak was due to the fact that this was the most convenient meeting place, whether for trade or any other purpose. In the early seventeenth century Patna was still the "chiefest mart town of all Bengala" and the Company found it the most convenient centre for exchanging their imports for silks, cotton, sugar, opium, saltpetre and the other products of the neighbourhood. With the opening of the railway trade passed into other channels. The importers of the neighbouring districts found that to send a written order by post to Calcutta or elsewhere was cheaper than to send a *bepari* half way to make purchases at Patna; and with the cheapening of railway freights Patna lost her connection with the exporting trade also, for the practice of transshipping goods destined for Calcutta from rail to river at Patna fell into disuse. The traders of Patna are still many and can still apparently support themselves by selling articles to each other

* Report on an Enquiry into the position of small traders and artisans in the city of Patna, by A. H. M. TALAB, 1914, page 5.

in a way reminiscent of the inhabitants of the Hebrides who subsist, it is said, by taking in each other's washing; but the outside world now-a-days looks to Patna for few commodities that are not manufactured there. It is interesting that, as a complement to the primitive local methods of hand manufacture and lack of standardization of the local products, the primitive method of purchase through *beparis* is still in force: in the marriage season when trade is brisk a number of them, chiefly from the Patna and Tirhut Divisions, will still be found in the town making purchases after personal inspection. The trade of Patna depends therefore more and more upon the local industries and unless they revive it is likely to dwindle further. Since the last census Patna has been made the capital of the province and this has resulted in the creation of a new city at the west end of the town. Here are located the offices of the local Government, the High Court and the university—though the last mentioned shows no immediate prospect of being realized in bricks and mortar. The population of this area is at present 9,453 and a certain number of persons are living in the western wards of the city who but for the proximity of the provincial headquarters would not be there; the decrease in the population is least at this end of the town. If a residential university comes into existence the population of the new capital and its environs is likely to increase, but otherwise no further great accession of population is to be expected. The occupation of Patna as a manufacturing and trading centre is in fact gone or at least according to present appearances going, and the substitution of the new occupation of being capital of a province is not going to restore the lost population. This decay of industry and trade is at the root of the decline in the population of the town which is steadier than the figures in Table IV suggest; for the apparent increase for 1872—1881 was caused by the defective enumeration of 1872 and that of 1901—1911 by the epidemic of plague that emptied the town in 1901. But for these apparent irregularities the decline since 1872 has been steady. On the present occasion the decrease amounts to 16,177 or 11·9 per cent., but if the accession of population owing to the creation of the New Capital be neglected, the decrease amounts to 25,630 or 18·8 per cent. This decrease is most marked in the Khaje Kalan, Chauk Kalan and Malsalami wards in the city proper; in Bankipore, which is adjacent to the New Capital, the population is stationary. According to the vital statistics there was a loss of population in the city of 9,000 in the ten years. On the other hand the proportion of immigrants from outside the district has increased from 10 to 16 per cent. but this is owing to the addition of the New Capital. It has already been stated that non-co-operation indirectly affected the accuracy of the enumeration in this town: it is impossible to say to what extent this may have been, but experience elsewhere shows that the population calculated on the vital statistics is much in excess of the reality. As the vital statistics here show a net decrease of 9,000 in the last ten years it is natural to suppose that the actual decrease is considerably greater.

18. Of the other towns in Patna district Barh (−674) and Dinapur (−148) show slight decreases while Bihar (+1,569), Khagaul (+1,180) and Mokameh (+3,000) have increased. The decreasing severity of the plague epidemics which had reduced the urban population of Patna district in the past must be held responsible for the turn in the tide. Bihar in particular had suffered greatly in the decade 1901—1911 and though there is an increase of 1,569 on the present occasion the population is still greatly below that recorded in 1872 (44,295) and all subsequent censuses down to 1911. Bihar is off the main lines of communication and it seems unlikely that it will recover its lost importance. Mokameh and Khagaul on the other hand are railway centres and a strategic position on the railway has much to do with the making or marring of towns: if the Ganges is ever bridged at Mokameh the importance of this town is likely to increase, and the railway settlement at Khagaul, although it may not increase rapidly, is not likely to lose its importance.

19. The phenomenal increase in Gaya town (+17,641) must be discounted owing to the fact already mentioned that plague had depleted the town in 1911. At a second census taken in June 1911 the population was returned as 70,423.

or 2,771 more than the figure returned on the present occasion. There are two chief interests in Gaya, the pilgrim traffic and the railway: neither of these shows any sign of abating and there is every reason to suppose that Gaya will maintain its position as an important city. The other towns in this district are small. Nawada, which shows an increase of 2,705 or 39·6 per cent. to 9,533 is now the largest of them. Jahanabad has also had an increase of 2,192 or 46 per cent., but this is accounted for by the town being deserted by many of its inhabitants in 1911 on account of the plague: the population is still lower than it was in 1901. All the other towns have suffered a loss, the largest being in Tikari where as usual plague has been insistent and where cholera also has caused many deaths: in 1881 the population of Tikari was 12,187; since then it has fallen away at successive censuses till it has reached 4,827, leaving Tikari the smallest municipality in the province.

20. The towns of Shahabad district have been described as decadent at each of the last two censuses. Though the relative cessation of plague has retarded this process in recent years, it is noteworthy that out of the six towns in this district all except one (Arrah) have lost population in the last decade: the loss is in no case serious and ranges from 1,211 in Buxar, where there have been destructive outbreaks of plague and cholera, to 17 in Bhabhua. In Arrah there is an increase of 2,220 or 5·8 per cent., but this only means that some part of the loss caused by plague in 1901—1911 has been made good: the population of the town stands a little over a thousand above the point where it stood in 1872 and well below the point at which it stood from 1881 to 1901. The industrial interests of this district lie in the south, in the workshops and quarries at Dehri, outside the towns. The towns are local markets and centres of administration and nothing has occurred in the last ten years to increase their importance or size.

21. Monghyr contains two large towns in close proximity, Monghyr and Jamalpur. The population of the former has been falling away since 1872, largely because, apart from the fact that it is the headquarters of the district there was little to attract outsiders to the town and largely also owing to the destruction of human life caused by plague in recent years. Nowadays there is a strong industrial interest near by in the shape of a tobacco factory on modern lines which employs over 1,500 hands and the force of the plague in the last ten years has been stayed: perhaps owing to these reasons the population of the town is stationary (-82). Jamalpur contains the railway workshops of the East Indian Railway, which are likely to increase in size rather than the contrary: this town shows an increase of 4,301 or 21·0 per cent. and the town would be very much larger than it is if most of the operatives did not live in the surrounding villages and come in every day to their work in workmen's trains. Khagaria which is a trade centre on the Bengal and North-Western Railway in the north of the district has again lost heavily to the extent of 1,283 or 11·9 of its population: Shaikhpura which is a similar centre on the South Bihar Railway has gained slightly once more. The other two towns, Lakhisarai and Begusarai, have been treated as such for the first time: of the two Lakhisarai, owing to its commanding position on the railway and growing importance as a collecting and distributing centre, would appear likely to develop the more rapidly of the two.

ORISSA.

22. After South Bihar in the importance of its urban population, but at a long interval, comes Orissa where the proportion of the urban to the total population (38 per mille) is little more than half what it is in South Bihar and would be considerably smaller but for the existence of two large towns, Cuttack and Puri. In Cuttack there are some industrial interests, but they are on a small scale; the chief business in Puri is catering for the pilgrims and for visitors who come for their health's sake; the other four towns in this division are simply collecting and distributing centres for the surrounding rural area with small colonies of the learned professions such as gather at district and subdivisional headquarters. The towns of Orissa have not been

affected by the industrial stirrings of the last ten years and it was not to be expected that they would show much development. Actually they have all suffered loss, which amounts to 6 per cent. on the aggregate urban population. The loss is heaviest in Balasore town where the death-rate for the last six years from influenza and fever has been exceptionally heavy; here it amounts to 20 per cent. In Cuttack the loss amounts to 1,521 or 3 per cent., in spite of extensions of the municipal boundary. At Puri the pilgrim traffic causes great fluctuations in the population; in 1901 the population was returned as 49,334, and the number of pilgrims was estimated at 17,000 : in 1911, when the number of pilgrims was about 5,000, the population only sank to 39,686 showing that the permanent population of the town was increasing; on the present occasion the number of pilgrims recorded was only 2,243 so that the permanent population was 36,451 as compared with a permanent population of 34,393 in 1911. Apart from the pilgrims therefore the population of Puri alone of the towns in Orissa is increasing, the increase being due to its development as a seaside health resort.

CHOTA NAGPUR PLATEAU.

23. In the Chota Nagpur Plateau the proportion of the population living in towns is the same as in North Bihar, 27 per mille, but the towns are more numerous and smaller. In the whole of the Feudatory States there are but six small towns and they contain only 6·2 per mille of the population. The aggregate population of the five towns of the Santal Parganas is 42,138 only. Of these Dumka shows a marked increase of 1,767 or 31·4 per cent. owing to an increase of area and Deoghar and Madhupur which are favourite places of residence for Bengali gentlemen also show slight increases. Rajmahal, although nominally the headquarters of a subdivision, is a town of the past and has lost heavily. The centre of interest has shifted to Sahibganj which is a railway settlement and a centre of trade, especially in *sabai* grass: the population of this town also has decreased but this is owing to plague depleting the town at census time. The population of both the towns of Sambalpur, which were treated as such in 1911, *viz.*, Sambalpur and Bargarh, increased slightly in response to the general increase in the district.

24. In the towns of Chota Nagpur proper there have been some marked variations. The population of the town of Hazaribagh is stationary: the town is many miles from the nearest railway station, but it has a pleasant climate and educational facilities and is a favourite place for retirement; the police training college and a large central jail are also located here and account for a not inconsiderable part of the population. The days of Chatra's greatness are past; the local trade has passed into other channels and the town, although recently promoted to be the headquarters of a subdivision, is on the decline. Giridih on the other hand which is a centre of the coal trade shows an increase of 8,206 or 76·9 per cent. This is owing to an increase in the municipal area of over 7,000 acres in 1918, but the extension of the boundary is itself evidence of the growth of urban conditions no less than an increase in the population.

25. In the next district, Ranchi has increased by 2,103 or 6·4 per cent. When a separate administration was first formed for Bihar and Orissa Ranchi was temporarily made the provincial headquarters all the year round; and now that the headquarters of Government have moved to Patna, Ranchi still remains the *quasi* hill station. Under the present influence of the local Government numerous local institutions, educational and other, have developed more rapidly than might otherwise have been the case: the value of house property has gone up and a number of new houses have been built. Quite apart however from the presence of Government, Ranchi would seem to be a town with a future; it is already much the largest town on the plateau and it is centrally situated for the coal-fields in Manbhum and Hazaribagh and for the iron ore deposits of Singhbhum, to say nothing of other more problematic local developments. It also is healthy and has a pleasant climate.

which makes it like Hazaribagh a favourite place of retirement. The town has steadily developed in the last half century and is likely to develop further in the future. Since the last census the narrow gauge railway line from Purulia has been extended beyond Ranchi to Lohardaga : but Lohardaga was before that a town with an established position and it has only an increase of 379 to show on this occasion. Bundu, probably owing to the slump in the lac trade, has lost 1,915 or more than a quarter of its population.

26. In Palamau, Daltonganj and Garhwa have both increased markedly, Daltonganj to the extent of 2.638 or 36.7 per cent. and Garhwa to the extent of 5,428 or 129.3 per cent. Daltonganj is the terminus of the only railway in Palamau and is the trade centre for the whole of the east and a great part of the south of the district : as the trade of Palamau opens out, so, until new railways are opened, is the importance of Daltonganj likely to increase. The development of Garhwa is phenomenal. Garhwa is near Daltonganj but on the other side of the Koil which is unbridged at that point : it commands the markets in the west and part of the south of the district and is the channel

YEAR.	Amount for which bazaar was settled.	
	Daltonganj.	Garhwa.
	Rs.	Rs.
1914-15	12,200	19,900
1915-16	13,025	23,900
1916-17	14,600	25,000
1917-18	20,200	30,000
1918-19	20,525	30,700
1919-20	20,100	35,000
1920-21	31,700	48,500

through which passes a heavy traffic with Mirzapur district in the United Provinces and Surguja State in the Central Provinces. The marginal statement which shows the sums for which the Daltonganj and Garhwa bazaars have been settled since the beginning of the war throws an interesting light on the increase in their population; these sums are paid by the lessees of the markets who take a commission on transactions and they therefore give a fairly accurate idea of the development of business.

27. In Manbhum the urban population has increased from 30,688 in 1911 to 46,364. This is chiefly due to the inclusion as a town of Dhanbad with a population of 11,973, but nevertheless the population of all the towns in the district has grown. The most marked increase is that of Raghunathpur by 2,307 or 55.1 per cent., which is due primarily to the inclusion of another 720 acres in the municipality in 1913. The population of Purulia has increased once more, by 1,275; this town, which occupies a favourable position at the very centre of the district and at the junction of the narrow gauge line to Ranchi and Lohardaga, has increased steadily since 1872, when the population was just a quarter of what it is now.

28. The urban population of Singhbhum has increased five-fold since 1911. The increase in Chaibassa is very small (+169) on this occasion, though with the advent of the Amda-Jamda extension of the Bengal-Nagpur Railway and the general rapid development of the district its growth is likely to be more rapid in future. Chakradharpur, now a municipality with a railway settlement adjacent containing a combined population of 7,944, has been treated as a town for the first time. But the most interesting instance in the whole province of the growth of urban conditions is Jamshedpur.

29. Unlike the other cities of the province, Jamshedpur is a creation of yesterday, or rather it is still being rapidly created to-day. Its romance

JAMSHEDPUR.

is a romance of the twentieth century. Only fifteen years ago Sakchi and the other villages which have since been absorbed into the town were indistinguishable from hundreds of other agricultural villages in what was then a quiet corner of Singhbhum district; the town is indeed still known to the local population by the name of one of those villages, Kalimati. Then after a series of romantic coincidences came the discovery of iron ore in large quantities and of fine quality first in Drug district and then in Mayurbhanj State. Padampur in Sambalpur district, as being approximately half way

between the iron ore deposits and the coal-field, was first selected for the site of the new iron and steel works projected by Mr. Jamshedji Tata, but when the ore was discovered in Mayurbhanj, the site was changed to Sini and subsequently to Sakchi in the angle of the Subarnarekha and Kharkhai rivers which was considered to be more favourably situated as regards water-supply and in other respects. In 1907 Government acquired 3,564 acres of land at a cost of Rs. 46,332 for the company. The first stake of the Tata Iron and Steel Works was driven on February 27, 1908; the construction of the plant began in the autumn of 1908, and the foundations were laid in May 1909. At the census of 1911 Sakchi, as the town was then called, contained a population of 5,672 persons engaged in the erection of the blast furnaces. In December of that year the first iron was produced. Since then the development has been rapid. The original capacity of the plant was 160,000 tons of pig iron, 100,000 tons of steel, 70,000 tons of rails, beams and shapes and 20,000 tons of bars, hooks and rods in a year. But the scope of the works has since been extended and by the time the so-called "greater extensions", consisting of new blast furnaces, steel works and rolling mills have been completed and brought into use the out-put will have more than doubled. In addition to this a number of other companies, known locally as the "subsidiaries" which utilize the products of the Tata Iron and Steel Company are erecting works in the immediate neighbourhood. The Calcutta Monifieth Company which manufactures machinery chiefly for jute mills is already in operation, as is also the Hume Pipe and Concrete Construction Company which originally came to Jamshedpur to manufacture pipes for the town. Other factories are now in process of construction which will manufacture tin plate, enamel ware, wire, electrical cables, and agricultural instruments. To make adequate provision for these extensions Government recently purchased another 12,000 acres at a cost of about Rs. 15 lakhs on behalf of the company and the subsidiary companies are located in this area as tenants of the Tata Iron and Steel Company.

30. There can be few places where east meets west or ancient confronts modern in more violent contrast than at Jamshedpur. In the mills European and American operatives who come to Jamshedpur for a few years on contract work shoulder to shoulder with Indians from every part of the country, of whom the Punjabis, the local aboriginals (known in the town as "junglis") and the Chattisgarhians are the most noticeable. Persons born in every province of India from Burma to the North-West Frontier, from Nepal, Afghanistan, China and Ceylon, from seven different European countries, from the United States, Canada and Australia were enumerated in this town at the census. To house this great and various multitude a large town has sprung into existence in the last few years and indeed houses are still springing up rapidly; over 1,500 houses or blocks of quarters have been built by the company in the last two years. The town has been carefully laid out with parks and recreation grounds. Each class of workers is housed according to its kind: the highest paid employés are accommodated in masonry houses with electric lights and fans; smaller houses of varying sizes are provided for persons on smaller salaries and the coolies are provided with sites in the "coolie towns" in which they house themselves in huts usually of branches cut from the neighbouring jungles and where, subject to certain restrictions, they live their own lives without interference. In this town there is no municipal government, but the company plays the part of the benevolent autocrat. The inhabitants are provided with pure water; medical attendance is provided free for all and free use is made of it except by the "junglis" to whose way of thinking an amputation is the inevitable result of a visit to hospital. A staff of welfare workers is provided by the company to look after the well-being of its employés. The employés are also provided with rice and cloth at controlled rates through co-operative stores: as a change from cock fighting they can and do watch wrestling or football or even baseball matches; keen rivalry and great enthusiasm exists between the different departments in these matches. And last but not least they can attend the cinema which the company provides free of charge for their benefit. It is not surprising that high wages and novelties of this kind should make Jamshedpur a popular

resort for the local labourer when he is not engaged in his fields. It is estimated that only some ten per cent. of the "junglis" who work in the mill have cut themselves off from their villages and settled permanently in the town, while amongst the Chattisgarhians the percentage is rather higher. The labourers come in batches including women who find employment in fetching and carrying, loading and unloading or in shovelling in the coke ovens, work at which they are more expert than the men. The children come too and can be educated in the company's schools. The work is hard but congenial, and the aboriginals are perfectly at home in the strange surroundings: *there is no place so noisy or uncomfortable but they contrive at intervals to snatch a few minutes' sleep there.* Some of them also show *great aptitude for the work and have risen from coolies to being mates and mixermen on Rs. 50 to Rs. 60 a month.* It would be difficult to exaggerate the effect caused in the neighbourhood by the sudden appearance of this town as a source of profit and as a means of education and the opening up of horizons undreamed of before. The local labour is for the most part unskilled, and the Hos, the Santals and the Bhumijes are the local tribes that resort most freely to the mills. The Oraons prefer to work outside on piece work with contractors where they can earn more, women earning as much as annas 12 a day. But nearly half the population of the town was born outside the province. The Central Provinces supply a large number of unskilled workers and so does Madras from round Vizagapatam. The skilled workers come more from the United Provinces, from Bombay and the Punjab. Generally speaking the unskilled workers take their savings home with them, while the skilled workers are responsible for the heavy remittances by money order from the Jamshedpur post office. In January 1921 for instance Rs. 1,40,000 were despatched in this way by money orders of which the average value was Rs. 20.

31. Subsidiary Table II shows the proportion of the adherents of each main religion who live in towns. The three religions numerically least

important are proportionately the most numerous in towns, the Parsis with 688 per mille, the Sikhs with 578 per mille and the Jains with 288 per mille. This is natural, for the religions with few adherents are the religions of strangers and strangers are likely to be found in the towns. Moreover the Parsis are pre-eminently traders and so are the Marwaris, who form the most important part of the Jain community, while the Sikh immigrant in this province is usually a mechanic: all these occupations are occupations of the town. Amongst the four main religions the Muhammadans are most addicted to town life; out of every 1,000 Muhammadans 80, as in 1911, live in towns, the proportion being more than double that of the Hindus (34 per mille): in the population of the province as a whole there is one Muhammadan to every eight and a half Hindus but in the towns there is one Muhammadan to about four Hindus. The proportion of the Muhammadan population living in towns is highest in Orissa, and in Orissa it is highest in Balasore district, where more than a third of the population of Bhadrakh consists of Muhammadans; but the high proportion is due rather to the small number of Muhammadans living in the rural areas than to the large number living in towns. After Orissa the proportion is highest in South Bihar and it is here that the Muhammadan element is most important: of the urban population of South Bihar, 23.1 per cent. or nearly a quarter are Muhammadans: in Aurangabad and Sasaram the proportion reaches 39.8 per cent., in Sherghati and Bihar also it is over 33 per cent.: in Patna where the Muhammadan community is both numerous and important, they form just under one quarter of the total population. The exceptionally high proportion of the Muhammadan population living in towns in Sambalpur and Singhbhum is due, as is the case of Orissa, to the small number of Muhammadans in the rural areas. After the Muhammadans come the Christians, out of every 1,000 of whom 78 live in towns. The proportion generally speaking varies inversely with the number of Christians in the district. Where the number of Christians is great, as in Ranchi, the vast majority of them are aboriginals living in villages: where the number is small, the proportion of foreigners, Anglo-Indians and immigrant Indian Christians is high and the usual occupations of these classes, such as

Government service, the learned professions, industry, transport or trade, centre in the towns. The proportion has slightly increased since 1911 owing to an increase in the Chota Nagpur Plateau. Although only 34 out of every 1,000 Hindus live in towns they account for 76·3 per cent. or more than three-quarters of the aggregate urban population of the province. The proportion of Hindus living in towns has increased but this only means that the urban population of the province has increased, and the nature of this increase has already been examined. Amongst the Animists only four in every thousand live in towns; this low proportion is due partly to the fact that the Animistic tribes are shy traffickers who keep away from the towns preferring their ancestral fields and the jungle, but partly also to the fact that when an Animist comes to live in a town the tendency is strong for him to lose touch with his tribal traditions and to turn Hindu. That there should be Animists in the Tirhut Division and that 1,000 per mille of them should be living in towns is accounted for by the fact that 2 male Bhuiyas and 1 female happened to be passing through Muzaffarpur on the census night and were enumerated there, one of them at the railway station and the other two at the sarai.

32. The proportion of females to males in the total population of the province is 1,029 per mille; in towns it is 877 per mille. In Jamshedpur the proportion is only 671 per mille but the

URBAN POPULATION BY SEX.

circumstances there are exceptional as the population born in the town is very small and less than half the population was born even in the district; the population therefore consists of immigrants, many of them unattached, and the proportion of permanent homes and so of females in the town is small. If this town be omitted from class II of towns (*i.e.*, those with a population of 50,000—100,000) the proportion of females varies with the class of towns inversely to their size, the range being from 524 in Class I to 954 in Class VI. This is what might be expected because the industrial, commercial and professional interests which draw the wage-earners from their families are generally concentrated in the larger towns; immigration to these towns therefore is common and as the immigrants are generally males, the proportion of males found there is higher and that of females lower than elsewhere.

VILLAGES.

33. The vast majority of the population of the province however live in the rural area in villages. In the British districts the census village is the *mauza*, *i.e.* the survey and settlement village

THE CENSUS VILLAGE.

which is a parcel of ground with a definite boundary which may contain one or more groups of houses or even no houses at all. The only exceptions to this rule on the present occasion were the Khondmals subdivision of Angul where there has been no village survey and certain parts of Manbhum where, as the survey and settlement was not complete, the residential village or group of houses and in the coal-field proper the colliery was treated as the basis of the census organization. The disadvantage of basing the census organization on the residential village has been explained in previous reports; briefly it is that it is impossible to decide which groups of houses form independent villages and which groups are merely parts of other villages: also that, as groups of houses appear or disappear between one census and another, any reliable comparison from one census to the next is impossible. As the survey and settlement of Manbhum will have been completed before the next census, the difficulties connected with the residential village will not be felt again because in the valleys of the Khondmals subdivision the groups of houses which constitute the villages are scattered and remote from one another.

34. In order to explain what the survey and settlement *mauza* is it is necessary to go back some ninety years. The first attempt to remove the indefiniteness of village boundaries, which had proved a fruitful source of dispute and litigation since the decennial settlement, was the revenue survey of the Lower Provinces which began in 1836 and lasted for nearly forty years. Village maps were then prepared for all the territories now comprised in the

province of Bihar and Orissa except the districts of the Chota Nagpur Plateau. The village (*mauza*) boundaries were demarcated by an official called the superintendent of survey and maps were prepared accordingly by the revenue surveyor who was also responsible for demarcating the estates of revenue paying proprietors. Owing to want of clearness in the instructions and the various ways in which they were interpreted there was much confusion between the estate and the *mauza* which in some cases was coterminous with the estate, in others formed part of an estate and in others again included several estates. In the districts to which the operations were first extended it appears to have been the intention to include all the lands of a particular estate, wherever situated, in the *mauza* in which most of the estate lay, and in these districts it is not uncommon to find revenue survey *mauzas* which include five or six insignificant parcels of ground separated from each other by several miles. This desire to identify the *mauza* with the estate also resulted in some cases in a number of what would ordinarily be considered villages being included in a single *mauza*. Towards the end of the operations ideas changed and there was a tendency to treat as *mauzas* groups of cultivated holdings usually with a central site for dwelling houses and sometimes with waste land attached without reference to the boundaries of the estates.

35. Since the day of the revenue survey, survey-settlement operations have been carried out in practically every district in the province under the Bengal Tenancy Act or the Chota Nagpur Tenancy Act. Under the original Bengal Tenancy Act the "village" was the revenue survey village, but experience proved that the boundaries as laid at the revenue survey were not always suitable and therefore, when the Act was revised in 1907, power was taken to vary the boundaries of the villages as then laid down. The result was that in all districts of Bihar cadastrally surveyed down to the year 1907, *viz.*, the districts of North Bihar and a large part of Monghyr, the revenue survey village is still the *mauza*, but that in South Bihar (except in parts of Monghyr) which was surveyed after that date the *mauza* is the revenue survey village with modifications, the modifications being made where the *mauzas* were unduly large and included a number of well-defined blocks of houses or where they were inconveniently small and could readily be amalgamated with other units. On the other hand no modifications were made in the village boundaries in the districts of Saran and Champaran, where there has been a revisional settlement since 1907, so that for instance there is still a *mauza* in the Bagaha thana of Champaran district with an area of 27,508 acres.

36. In Orissa the villages were demarcated between 1890 and 1900. To begin with the village boundaries were laid according to the records of the last settlement, but after a year's work it was decided to follow the boundaries of the revenue survey village: when a blind adherence to the revenue survey in turn proved impossible, the village boundaries as pointed out by the villagers were accepted.

37. Of the districts of the Chota Nagpur Plateau Ranchi was surveyed under the Bengal Tenancy Act: on the experience so gained the Chota Nagpur Tenancy Act was passed and the remaining four districts of the Chota Nagpur Division were surveyed in accordance with its provisions. The original Bengal Tenancy Act provided that, where there had been no revenue survey, the local Government might appoint an officer to determine village boundaries, and the boundaries of the villages in Ranchi were determined in this manner. In the other districts the village is, in accordance with the Chota Nagpur Tenancy Act, the unit of survey adopted by the Settlement Department except that in parts of Manbhum and Palamau to which the revenue survey had extended it is the revenue survey village. In jungle areas there was some doubt as to the village boundaries but disputes were settled on the basis of actual possession without much difficulty. In the Santal Parganas the villages were demarcated by the Settlement Officer under the Santal Parganas Settlement Regulation: the first settlement was made in 1872—78 and in the more elaborate settlement and survey which was

completed at the beginning of the current century the village boundaries laid down at the first settlement were generally adhered to. In Sambalpur the village boundaries were determined in the '80s in accordance with the Central Provinces Land Revenue Act, and in the Sadr subdivision of Angul the first cadastral survey was carried out between 1886 and 1889; in the Khondmals subdivision of that district no village survey has yet been made.

38. It is evident therefore that the word "village" as used in connexion with the census has different meanings in different parts of the province and that detailed comparisons of one district with another are not worth making. Of North Bihar and Orissa generally it may be said that the *mauza* is by no means necessarily the residential village. In South Bihar the correspondence is slightly closer for outstanding anomalies have been smoothed away, as for instance the *mauza* of Kauakol in Gaya which covered an area of nearly 39,000 acres was split up into 13 *mauzas* at the recent settlement. In Chota Nagpur generally the correspondence is closest. The largest *mauza* in the province which consists of over 72,000 acres and the smallest which consists of less than one acre are both in Monghyr district, the former in the south, the latter in the north. Bhagalpur boasts a *mauza* of over 50,000 acres and several *mauzas* of one acre: Champaran contains a *mauza* of over 27,000 acres, and Gaya, Saran, Muzaffarpur, Purnea, Ranchi and Singhbhum contain *mauzas* of over 10,000 acres. The average size of the *mauzas* is greatest in Ranchi (1,152 acres) and smallest in the Santal Parganas (296 acres). The average size in Bihar varies from 730 acres in Champaran to 352 in Saran: in all the three districts of Orissa it is between 300 and 400.

39. As the *mauza* is a geographical unit with fixed boundaries their number remains constant, but not all of them are always inhabited. The number of villages shown in Imperial Table I is the number of inhabited *mauzas* and this number therefore may and does fluctuate. A comparison between Table I for 1911 and Table I of this census reveals a decrease of 3,719, the greater part of which has occurred in Hazaribagh where there has been a decrease of 2,231 and Manbhum where there has been one of 1,174. This decrease is owing to the fact that in 1911 the census in both these districts was based on the residential village and villages were apparently more liberally recognized here than elsewhere in the Chota Nagpur Division.

Number of inhabited villages per square mile in the Chota Nagpur Division.

DISTRICT.	1921.	1911.
Hazaribagh ...	·9	1·2
Ranchi ...	·5	·6
Palamau ...	·6	·6
Manbhum ...	1·2	1·4
Singhbhum ...	·8	·9

the survey and settlement of the whole of Hazaribagh and of more than half of Manbhum has been completed and at the 1921 census the *mauza* was substituted in these areas for the residential village. The result has been greatly to reduce the number of inhabited villages, although the marginal table shows that the average number of villages to the square mile in these two districts is still greater than in any other district of the division. The variations in the number elsewhere are due largely to the influenza epidemic and scarcity of 1918-19 which led to whole villages being deserted.

APPENDIX TO CHAPTER II.

NOTE ON AN ECONOMIC CENSUS OF PATNA BAZAAR.

BY PROFESSOR C. J. HAMILTON.

THE enquiry was conducted, under my guidance, by the student members of the Chanakya Society during the autumn of 1920 and the spring of 1921.

INTRODUCTION.

Its object was to ascertain the number and kind of economic enterprises carried on in the Patna Bazaar, a term which was taken to mean the main thoroughfare extending for rather over seven miles from the Bankipore Maidan to the other end of Patna City. This thoroughfare contains the majority of the trading and petty manufacturing establishments of Patna. There are, however, a number of petty traders and manufacturers located in the side streets that lead from the main road. These have not been investigated. It was originally intended that these should be included but owing to the political conditions prevailing in the latter part of 1920 a number of investigators left the college and the scope of the enquiry was consequently somewhat narrowed. The area investigated is, nevertheless, sufficient to give an accurate idea of the kinds of things that are bought and sold, and to a less extent made, in a typical bazaar that serves the needs, primarily, of the resident Indian population and, secondarily, of the European population in a large mofussil station.

2. In explanation of the tables that follow the first point that should be noticed is the difficulty of classification. The various enterprises have been classified under the three main heads of wholesale and retail traders and manufacturers. But it is not always easy to define the head under which a particular enterprise should be placed. In an Indian bazaar the division of economic function between wholesale and retail selling and between selling and manufacturing is far less clearly marked than, for example, is the case in an English city.

3. Thus the larger shops not only sell retail, but are the sources of supply in many cases of the goods sold in the smaller shops. An instance of this was prominently afforded in the case of the sellers of boots and shoes. A boot and shoe shop of some size was several times found to be supplying stock to a smaller shop of the same kind close by, thus apparently stimulating competition with itself. The same thing occurred in the case of cloth dealers. There are different explanations of this apparently "uneconomic" conduct. In some cases the shops are really in a sense competitors. That is they are separately owned. But they meet the demands of different classes of customers. A humble class of customers will hesitate to enter a "superior" shop but will resort to the neighbouring shop which caters for that particular class. By supplying the poor man's shop the larger shop is not, therefore, sacrificing profits that it might gain for itself. The question of fixing competition prices between the two shops does not arise as neither of them adopts the system of fixed prices common in the case of large retail traders in western cities. Each transaction is settled after a process of bargaining. In other cases the supply of goods from one shop to another, although the shops may be trading under different names, does not involve dealings between potential competitors. It is not uncommon, particularly among cloth dealers, for several shops trading under different names to belong to the same firm.

Besides the combination of wholesaling and retailing, which is not uncommon, that of retailing and petty manufacture is very common. Prominent instances are afforded by the making and selling of such things as sweet-meats, ornaments of various kinds, cotton caps, *biri* cigarettes, etc. In order to avoid enumeration twice over the premises in which the making of the article is the occupier's chief activity have been counted under the head of manufacturing although the goods when made are sold at the same place.

4. A further difficulty of classification arises from the fact that English names signifying the main classes of retail shops seldom apply to the shops of an Indian bazaar. The high degree of specialization usually characteristic

of the shops of an English town is far less common in India outside the European centres of big cities. Nevertheless in a place of the size of Patna specialization in retailing is clearly marked. But the specialization often follows different lines. Thus in the case of the cloth seller, corresponding to some extent to the English draper, the business is confined to the sale of various kinds of cloth and trimmings, possibly also carpets, but does not include such articles as hosiery, sewing thread, needles, buttons, which are usually to be obtained from a general store. A very common type of shop in Patna is one which combines the sale of such articles as stationery, looking-glasses, brushes and combs, socks, and cigarettes. It might be described as the "young man's" shop but it is difficult to find an appropriate English name. For want of a more accurate description these shops have been enumerated under the head of "Fancy goods and stationery".

Sometimes business enterprise is shown in a quite unusual combination of trades. Thus in one case a bookseller and publisher, seeing a profitable opening, had started a coal godown from which he retailed coal imported from Jharia. Another combination not uncommon is the sale of books together with patent medicines.

5. The reasons for the different degrees of specialization or combination in retail trading in such a bazaar as that of Patna would seem to be chiefly the following :—

(a).—*The nature of the goods dealt in.*

In the case of vegetables or butchers' meat the character of the goods and the handling of them makes specialization almost necessary.

(b).—*The importance of buying.*

When large quantities of goods have to be stocked which are generally of the same kind and when the profit depends largely on the special knowledge of the shopkeeper as the buyer of his stock there tends to be a high degree of specialization. Instances are found in the case of the cloth dealers, the boot and shoe shop, the dealer in builders' materials, and the grain shops.

(c).—*The convenience of customers.*

The existence of special classes of customers in many cases determines the character of certain retail shops which cater for their varied wants as far as possible. Thus almost all articles regularly purchased by the European population are sold by a few "general stores". Similarly the wants of the student class are supplied by the shops to which I have referred as the young men's shops.

(d).—*Retailing as the adjunct of manufacture.*

A very large number of the petty shops of the bazaar are little more than the adjunct of the workshops of small artisans, mechanics, and manufacturers. The makers of certain classes of ornaments, of white caps, of *biri* cigarettes, of *hookahs*, of tin boxes, of basket-ware, of sweetmeats, of perfumes, are petty manufacturers and workmen first and shopkeepers second. The specialization in selling is due to the fact that each man is a small independent producer who sells what he makes.

The information which the investigators sought to obtain included that relating to the length of time each enterprise had been established; the volume of trade, whether it was increasing or decreasing; the source of supply from which the stock was obtained; and the extent of the market for which the enterprise catered. On none of these points was it possible to get really satisfactory replies. The information as to length of establishment was as follows :—

Established 20 years and over	...	...	18·5 per cent.
„ 10 to 19 years	...	...	20·5 per cent.
„ 5 to 9 years	...	...	18·5 per cent.
„ 1 to 4 years	...	...	28·5 per cent.
„ less than 1 year	...	...	14·0 per cent.

If these replies are correct it suggests a very high degree of instability in the trade of the smaller shopkeepers. The evidence went to show that among small sellers of vegetables, of *pan* and cigarettes, of stationary, of certain kinds of ornaments there was constant change. Small capitals are ventured and lost. Or a workman will gather a few customers, perhaps for a season's trade, and give up the premises at the end of it.

No reliable information was obtained as to the volume of trade. In most cases those in charge of shops evidently felt suspicion as to the object of the enquiry. In the majority of cases the business was said to be declining and this was usually attributed to the effect of the war in making raw materials difficult to obtain or in raising prices and decreasing sales. But business was in many cases admitted to be expanding. Undoubtedly the fact that stands out is the very large number of rival dealers or suppliers of the more general wants of customers. The large number of cloth shops, of grocers, of ornament makers, of sellers of cigarettes, aerated waters, stationery, and fancy goods suggests that in most cases each seller supplies a very small number of customers. Indeed in many cases the so-called shops are little more than a very small front space of a dwelling the total rent for which would not exceed a rupee or two per month.

The source of supply of the stock in trade in the case of the larger shops was generally stated to be either the Indian manufacturing centre or the port of import such as Bombay or Calcutta. No authentic case was found of direct import from abroad. It may be noted that in not a few cases the source of supply was stated to be Dinapore, suggesting that in some respects Dinapore is a more important trading centre than Patna.

6. Very few cases occurred in which Patna shops supplied customers at any distance. The trade of the Patna bazaar is almost wholly local. It is worthy of note that although Patna is the capital of a Province there is not a single shop financed or managed by European enterprise and not a single shop with a stock or mode of management comparable to that of a large store in an English town of any importance.

I.—RETAIL SHOPS.

Tobacco; betel; aerated water	...	...	...	126
Cloth dealer	...	...	...	97
Grocer (kichari farosh)—(spices, sugar, salt, grains)	...	...	...	96
Stationery and fancy goods	...	...	...	80
Fruit and vegetables	...	...	...	45
Grain seller	...	...	...	35
Boots and shoes	...	...	...	33
Cap seller (pallas)—(often combined with other fancy articles)	...	...	...	28
Druggist	...	...	...	25
Oil seller	...	...	...	23
Butcher	...	...	...	19
Oilman's stores and hardware	...	...	...	17
Bookseller and printer	...	...	...	16
Brassware	...	...	...	15
Rope and basketware	...	...	...	15
Ironmonger	...	...	...	13
Perfumer	...	...	...	12
Earthenware	...	...	...	11
Tea shops	...	...	...	9
Liquor vendor	...	...	...	9
Opium and ganja	...	...	...	9
Coal dealer	...	...	...	9
Cooked rice	...	...	...	8
Bangles (lac and glass)	...	...	...	6
General stores	...	...	...	6
Hotels for coolies	...	...	...	6
Wood and fuel	...	...	...	6
Bhunja	...	...	...	6
Parchun	...	...	...	6

I.—RETAIL SHOPS—Concl'd.

Cycle repairs and accessories	...	...	...	5
Milk, dahi	...	...	...	5
Glass hirer	...	...	...	5
Old bottles	...	...	...	5
Hookahs, sandals and pipes	...	...	...	5
Builder's materials	...	...	...	3
Embroidery materials	...	...	...	3
Cotton thread	...	...	...	3
Furniture dealer	...	...	...	2
Sporting requisites	...	...	...	2
Lime dealer	...	...	...	2
Leather goods	...	...	...	2
Dye seller	...	...	...	2
Chhoa (unprepared tobacco)	...	...	...	2
Fodder seller	...	...	...	2
Mat seller	...	...	...	2
Typewriting machines	...	...	...	1
Baker	...	...	...	1
Steel trunks	...	...	...	1
Coach works	...	...	...	1
Spectacle shop	...	...	...	1
Picture framer	...	...	...	1
Sewing machines	...	...	...	1
Carpet seller	...	...	...	1
Dealer in old iron	...	...	...	1
Fan seller	...	...	...	1
Soap dealer	...	...	...	1
Photographer	...	...	...	1
TOTAL				848

II.—MANUFACTURING AND RETAIL.

Sweetmeats	...	...	...	81
Tailor	...	...	...	60
Goldsmith	...	...	...	53
Ornament maker (various)	...	...	...	49
Tikuli maker	...	...	...	28
Tinsmith (maker of tin boxes, dhilaris, etc.)	...	...	...	22
Brassware maker	...	...	...	20
Wood worker (maker of sandals, charpoys, ekkas, etc.)	...	...	...	20
Dyer	...	...	...	19
Cotton thread maker	...	...	...	17
Blacksmith	...	...	...	17
Shoemaker	...	...	...	17
Watch repairer...	...	...	...	15
Repairer of tin or iron goods	...	...	...	14
Cabinet maker	...	...	...	12
Biri maker	...	...	...	12
Coppersmith	...	...	...	9
Oil presser	...	...	...	9
Chilam maker...	...	...	...	8
Book binder	...	...	...	7
Lac bangle maker	...	...	...	7
Silver foil maker	...	...	...	6
Naicha maker (tobacco pipes)	...	...	...	5
Looking-glass maker	...	...	...	5
Fire-work maker	...	...	...	5
Hookah maker...	...	...	...	5
Umbrella repairer	...	...	...	5
Baker	...	...	...	4
Kite maker	...	...	...	4
Cycle and gramophone repairer	...	...	...	4
Spectacle maker	...	...	...	4

II.—MANUFACTURE AND RETAIL—Concl'd.

Cap maker ...	...	...	...	4
Embroidery worker ...	...	...	...	3
Stone-setter (jeweller) ...	...	...	...	3
Carpet weaver ...	...	...	...	2
Cotton rope maker ...	...	...	...	2
Soda water maker ...	...	...	...	2
Harp maker ...	...	...	...	2
Repairer of shawls ...	...	...	...	2
Cage maker ...	...	...	...	2
Fan maker ...	...	...	...	2
Electro-plater ...	...	...	...	1
Motor and carriage works ...	...	...	...	1
Manufacturing stationer ...	...	...	...	1
Rubber-stamp maker ...	...	...	...	1
Flour mill ...	...	...	...	1
Type founder ...	...	...	...	1
Copper plater ...	...	...	...	1
Image maker ...	...	...	...	1
Electric light repairs ...	...	...	...	1
Ghee maker ...	...	...	...	1
Mica goods ...	...	...	...	1
Nakli maker ...	...	...	...	1
Glass maker (from old glass) ...	...	...	...	1
Thread reeling ...	...	...	...	1
Hinge maker ...	...	...	...	1
Drum repairer ...	...	...	...	1
Tin foil maker ...	...	...	...	1
Stick maker ...	...	...	...	1
Tile maker ...	...	...	...	1
TOTAL ...				586

III.—WHOLESALE TRADERS.

Tobacco godown and dealer ...	...	...	...	3
Yarn dealer ...	...	...	...	3
Timber dealer ...	...	...	...	1
Lime and cement dealer ...	...	...	...	1
Pepper dealer... ..	...	...	...	1
TOTAL ...				9

SUBSIDIARY TABLE III.—TOWNS CLASSIFIED BY POPULATION.

CLASS OF TOWNS.	Number of towns of each class in 1921.	Proportion to total urban population.	Number of females per 1,000 males.	VARIATION PER CENT. IN THE POPULATION OF TOWNS AS CLASSIFIED AT PREVIOUS CENSUSES.					VARIATION PER CENT. IN URBAN POPULATION OF EACH CLASS FROM 1872 TO 1921.	
				1911-1921.	1901-1911.	1891-1901.	1881-1891.	1872-1881.	(a) In towns as classified in 1872.	(b) In the total of each class in 1921 as compared with the corresponding total in 1872.
1	2	3	4	5	6	7	8	9	10	11
BIHAR AND ORISSA.	81	100	878	+3.22	-2.8	-6.7	+6.6	+13.2	+6.1	+32.1
I.—100,000 and over	1	8.5	824	-11.9	+1.0	-13.4	-3.2	+7.4	-24.5	-24.5
II.—50,000-100,000	5	21.2	817	-5.4	-9.5	-12.6	+0.2	+8.3	-1.5	+21.5
III.—20,000-50,000	12	28.5	884	+3.2	-4.4	+4.2	+8.1	+5.2	-5.1	+26.1
IV.—10,000-20,000	23	21.8	903	+0.4	-1.9	-0.7	+0.0	+15.0	-10.5	+25.0
V.—5,000-10,000 ...	35	18.2	913	+23.7	+2.7	+0.4	+19.8	+20.6	+21.7	+17.7
VI.—Under 5,000 ...	6	1.8	95	+42.0	+16.2	+10.8	+37.4	+55.5	+15.4	+8.0

SUBSIDIARY TABLE IV.—CITIES.

City.	Population in 1921.	Number of persons per square mile.	Number of females per 1,000 males.	Proportion of foreign born per mille.	PERCENTAGE OF VARIATION.					
					1911-1921.	1901-1911.	1891-1901.	1881-1891.	1873-1881.	1872-1921.
1	2	3	4	5	6	7	8	9	10	11
Patna ...	110,976	7,938	824	161	-11.9	+1.0	-15.4	-3.3	+7.4	-24.5
Gaya ...	67,593	3,445	810	87	+35.3	-30.0	-11.3	+5.3	+14.3	+1.1
Bhagalpur ...	68,878	6,203	851	75	-7.4	-1.9	+0.6	+1.3	+4.4	+5.4
Jamshedpur ...	57,360	2,304	621	724	...	...	...	...	...	...

CHAPTER III.

BIRTH-PLACE.

The statistics relating to the birth-place of persons enumerated in the province are contained in Imperial Table XI. These statistics are presented in a different form together with statistics relating to emigrants, *i.e.*, persons born in the province but enumerated outside it, in the following Subsidiary Tables at the end of the chapter :—

INTRODUCTORY.

Subsidiary Table I.—Immigration (actual figures).

Subsidiary Table II.—Emigration (actual figures).

Subsidiary Table III.—Migration between Natural Divisions (actual figures) compared with 1911.

Subsidiary Table IV.—Migration between the province and other parts of India.

Subsidiary Table V.—Occupations of emigrants from certain districts of Bihar and Orissa to Calcutta.

Subsidiary Table VI.—Birth-place of skilled and unskilled workers in industrial establishments in Bengal.

2. The population of the province, as explained in Chapter I, is essentially home loving. The occupation which most of them pursue is, and

TYPES OF MIGRATION.

has been from time immemorial, the cultivation of their fields, which does not encourage or give any scope for the gratification of the wander-thirst. Moreover the various restrictions on free action and free movement imposed by the caste system bind the people to their homes: the stronger the caste system the less does it make a man willing to place himself in a position where he has to rely on his individual judgment and where at any time he may encounter circumstances which are difficult or impossible to reconcile with his caste rules. The result is that people do not go out into the world to seek their fortunes; they only leave their homes when they have good reason to do so and they generally take the earliest opportunity of returning to them. These reasons and the resulting types of migration can be classified with some degree of accuracy. The following classification was made thirty years ago in the Punjab and it is still valid to-day in this province :—

(1) *Casual migration*, or the minor movements between adjacent villages. These movements affect the census returns only when the villages in question happen to be on opposite sides of a district boundary. There is generally an excess of females in such cases owing to the fact that it is the common practice for a Hindu to take his wife from a village other than that in which he lives, and the excess of females would probably be greater still but for the fact that young married women often return to their parents' houses for their first confinement.

(2) *Temporary migration*, due to journeys on business, visits to fairs and places of pilgrimage and the temporary demand for labour when, for instance, new roads, buildings or railways are under construction.

(3) *Periodic migration*, a particular type of temporary migration associated with the seasons of the agricultural year. When work is slack in the fields, labour moves away to find temporary employment elsewhere; and conversely at the stress of harvest time, in tracts where the population is sparse, labour will be attracted from elsewhere. This type of migration is of great volume and importance in Bihar and Orissa.

(4) *Semi-permanent migration*, due to persons residing in one place and earning their living in another. In such cases they usually retain their connexion with their own homes where they maintain and visit their families at intervals and where they return in their old age. This type of migration is practically confined to the male sex and is found chiefly amongst clerical

and skilled industrial workers, for instance amongst clerks in offices and men of the mechanic class. Younger members of joint families for whom there is no work at home often contribute to the family income in this manner.

(5) *Permanent migration*, when over-crowding drives people away from an area or when the superior attractions of another area induce people to settle there.

3. The marginal table gives the number and proportion of immigrants, i.e., persons enumerated in the districts of Bihar and Orissa who were born in other districts of the province and elsewhere. No less than 98.9 per cent. of the people enumerated in the province were born in the province and no less than 95.7 were born in the

PERSONS ENUMERATED IN THE PROVINCE WHO WERE BORN IN	Number (000s omitted).	Per cent of actual population.
Bihar and Orissa	37,540	98.9
District or state of enumeration ...	36,348	95.7
Contiguous districts or states ...	991	2.61
Other districts or states	201	0.52
Other parts of India	387	1.02
Contiguous districts or states ...	170	0.44
Other districts or states	217	0.57
Outside India	35	0.09

district or state in which they were enumerated. In comparison with these figures the number of persons born elsewhere is insignificant. Most of them were born in contiguous districts, whether inside or outside the province, and amongst this class females predominate, which shows that such immigration is mostly of the casual type. The volume of migration between non-contiguous

PERSONS BORN IN THE PROVINCE WHO WERE ENUMERATED IN	Number (000s omitted).	Per cent of actual population.
Other parts of the Province	1,192	3.14
Contiguous districts or states ...	991	2.61
Other districts	201	0.52
Other parts of India	1,917	5.05
Contiguous districts or states ...	227	0.59
Other districts	1,690	4.45
Outside India	01	0.002

immigration viewed from the reverse point of view: but as regards other parts of India the difference is vast. In exchange for 422,000 immigrants received the province sends out 1,917,000 emigrants, or in other words it loses over four persons for every person it gains by migration. But this loss by migration is not a permanent one. It has already been stated that the periodic type of migration which is adjusted to the seasons of the agricultural year is of great volume and importance in Bihar and Orissa. Further information regarding this type of migration will be given presently, but meanwhile it may be stated generally that the slack time in the agricultural year begins when the winter rice crop has been cut and ends in some places with the harvesting of the spring crops or more generally with the bursting of the monsoon. This therefore is the time of maximum emigration. In February the province is at its emptiest: by March, when the census is taken, the labourers are beginning to return to their homes. The census returns therefore show nearly but not quite the full range of the normal tide of emigration.

between non-contiguous districts amounts to little more than one-fifth part of the migration between contiguous districts: South Bihar is the origin and two districts, Purnea and Manbhum, together are the destination of more than half of it. Migration of this type is therefore fairly restricted in its origin and more so in its destination. The figures prove that in most of the districts and states of the province there is no attraction for immigrants. In striking contrast is the next marginal statement which shows the number of emigrants, i.e., persons born in Bihar and Orissa who were enumerated outside their district or state of birth, with proportion per cent. of the actual population. The emigration to contiguous and non-contiguous districts of the province is of course the corresponding

IMMIGRATION.

‡. The following table shows the number and proportion of immigrants in the various districts of the province :—

DISTRICT.	Number of immigrants.	Proportion per mille of actual population.
NORTH BIHAR.		
Saran	44,736	19·11
Champan	70,412	36·27
Muzaffarpur	65,332	23·71
Darbhanga	68,767	23·60
Bhagalpur	84,181	41·39
Purnea	204,094	100·80
SOUTH BIHAR.		
Patna	86,012	54·63
Gaya	44,707	20·76
Shahabad	49,318	27·14
Monghyr	71,416	35·18
ORISSA.		
Cuttack	33,285	16·12
Balasore	28,171	28·73
Puri	36,810	38·68
CHOTA NAGPUR PLATEAU.		
Hazaribagh	36,305	28·43
Ranchi	27,452	20·57
Palamau	31,358	42·75
Manbhum	153,324	98·99
Singhbhum	77,317	101·80
Santal Parganas	80,116	44·54
Angul	16,350	89·55
Sambalpur	43,721	55·38
Orissa States	254,296	66·79
Chota Nagpur States	9,210	60·39

The proportionate figures are illustrated in the marginal map. In Singhbhum and in Purnea over 1 person in ten enumerated was born outside the district. In Purnea it is the vacant spaces and light incidence of rent that draw: in Singhbhum and Manbhum in the centre of the province it is industry. Patna has a relatively high percentage of immigrants because it contains the capital town of the province with commercial and industrial interests, a number of educational institutions and the only cantonment. The attraction in the Orissa States, which are treated as a single unit, is the extent of the land still available for cultivation. This is also the case with Angul where the immigrants come from the neighbouring states, and where the population of the district is so small that a small number of immigrants produces a high percentage.

5. Immigration from outside India accounts for only 35,000 or .09 per cent. of the persons enumerated in the province and of these 30,000 were found in North Bihar, in the districts of Champaran, Muzaffarpur and Darbhanga.

IMMIGRATION FROM OUTSIDE INDIA. Practically all these persons came from Nepal and the great majority of them were females who evidently are wives brought from over the Nepal border: these wives usually belong to the lower castes. Outside North Bihar immigrants from outside India amounted to 1,000 only, in Patna district where there was a battalion of British infantry at Dinapore. They were numerous also in the industrial centres of Manbhum and Singhbhum, and in Ranchi where there are a large number of European missionaries. The most cosmopolitan population was found in Singhbhum, where natives of nine Asiatic and eleven European countries were enumerated as well as natives of America and Australia.

6. Immigration from contiguous districts of other provinces of India is more marked in the western than the eastern side of the province, showing a tendency of the population to shift in an easterly direction. Champaran, Saran and Shahabad each contains over 20,000 immigrants from contiguous districts of the United Provinces: in the case of Saran and Shahabad females greatly predominate, but in the case of Champaran the sexes are about equal, showing that there is some immigration from Gorakhpur to take up land on this side of the provincial boundary. In Palamau, Ranchi and Sambalpur, where communications with the west are less easy, the number is much smaller, but in the Orissa States, where land is to be had on cheap terms, there are again a large number of such immigrants (28,000) with a higher proportion of males. On the eastern side of the province immigrants from contiguous districts are most numerous in Manbhum (18,000) where the coal-field exercises a strong attraction. Purnea, which after Singhbhum contains the highest proportion of immigrants in the province, only contains 11,000 from the contiguous districts of Bengal, whereas from the contiguous districts of Bihar it contains ten times that number.

7. Immigration from non-contiguous parts of other provinces is only likely to occur under the influence of some strong inducement. Singhbhum heads the list in respect of this type of emigration with 34,000. Owing to the development of Jamshedpur skilled workers have been drawn to this district from all over India. The greatest number of foreign skilled workers in the iron and steel works come from the United Provinces, but a considerable number also come from Bengal and the Central Provinces. Amongst the unskilled workers by far the greatest number of foreigners come from the Central Provinces, where scarcity obtained at the time of the census, and it is also noteworthy that Madras and Bombay supplied a greater number of unskilled workers than the United Provinces or even than Bengal. Table XI shows that the Punjab, Bombay and Rajputana also sent a large number of immigrants into this district. Next to Singhbhum comes Manbhum with 32,000 immigrants from non-contiguous parts of other provinces: here the coal-field and the industries that have sprung up in the neighbourhood also attract workers from all over India. Subsidiary Table XX at the end of Chapter XII shows for immigrants enumerated in the coal-field charge (which included all the important collieries in the Dhanbad subdivision) their caste, their age and their birth-place. It shows that there is a large amount of migration to the coal-field inside the district of Manbhum especially amongst Bauris and Santals, though the number actually given is probably an exaggeration. After Manbhum itself Hazaribagh contributes more workers than any other district (18,000), the castes most numerous being the Bhuiyas, Turis, Goalas, Rajputs and Chamars. Monghyr sends 14,800 persons, of whom the Bhuiyas and Jolahas are most numerous, and Gaya sends 8,900, mostly Bhuiyas and Dosadhs. North Bihar sends very few and the Santal Parganas only 2,600, amongst whom Santals are the most numerous. From outside the province 5,400 workers, many of them Chamars, come from Bilaspur and 2,400, mostly Chamars, from Raipur in the Central Provinces.

Chamars also come from the United Provinces as well as Pasis and people of higher castes, notably Brahmans and Rajputs. It is noticeable that the men from the United Provinces who come generally from the higher castes do not bring their wives with them as do the men from the Central Provinces. A coal cutter with his wife now-a-days can earn Rs. 1-4-0 a day without much difficulty. Up-country workers without their wives usually earn from Rs. 50 to Rs. 60 a month: they can live comfortably on Rs. 20 a month and the balance is ordinarily sent home by money order. The districts in the United Provinces from which they come, Rai Bareilly, Mirzapur, Cawnpore, Azamgarh, Pratapgarh, Jaunpur, Unao and Allahabad, have been the source from which labour has been recruited for the collieries in Rewa State and at Singareni for many years past so that there is a supply of trained labour available there.

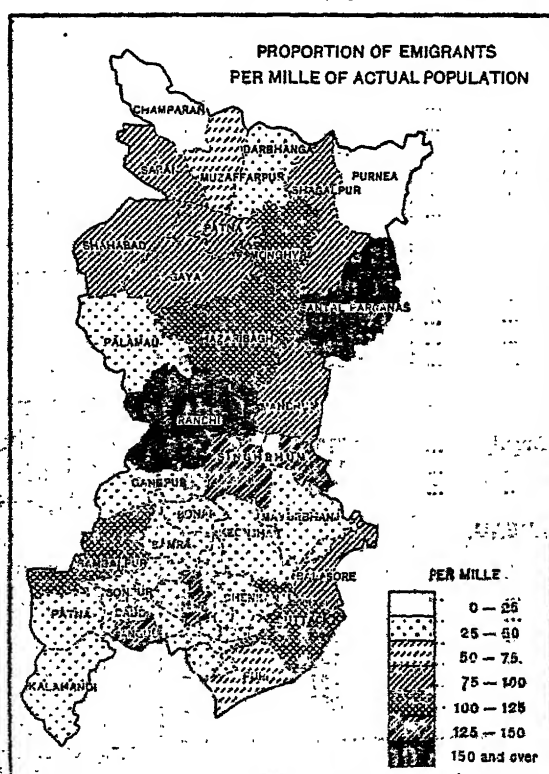
8. After Singhbhum and Manbhum the Orissa States attract most immigrants from non-contiguous parts of other provinces (25,000). Apart from a few up-country traders these immigrants are generally agriculturists. In most of the states the pressure of population is extremely light: in seven of them there are not even 100 persons to the square mile. Vast areas still await reclamation and, rents being generally low, it is natural that immigrants should be attracted from other parts where the pressure of population is greater. The same may be said of Sambalpur, the Santal Parganas and Purnea, the only other districts to which immigrants from non-contiguous parts of India are attracted in any numbers. The attraction of land at a low rental is strong enough in Purnea to attract 6,000, and in the Santal Parganas, which is more conveniently situated to the railway, 7,000 immigrants from the United Provinces: otherwise the immigration into these two districts comes from those parts of Bengal which, if not contiguous, are very nearly so. Apart therefore from commerce which attracts traders to all parts of the province from Bombay and Rajputana, apart also from the Manbhum coal-field, the developing industries of Singhbhum, and the vacant spaces in the Orissa States and in a lesser degree in Purnea, there is nothing in this province to attract immigrants from outside, and generally the immigration into the province may be said to be unimportant.

9. Immigration within the province itself also is unimportant. The migration between contiguous is five times as great as that between non-contiguous districts and states and the larger part of the immigrants are females which shows that a great deal of it is purely casual. Purnea and Manbhum alone attract immigrants from distant parts in any numbers. Purnea attracts population from the whole of North Bihar and in smaller numbers from South Bihar; even from the adjacent districts of Bhagalpur and the Santal Parganas the male immigrants are more numerous than the female which shows that the motive of immigration here is not matrimony but the occupation of land at a low rental. Manbhum draws most of its immigrants from Hazaribagh (36,000), Monghyr (23,000) and Gaya (19,000) and here again the males are noticeably in excess. The great majority of the immigrants of course come to work in the coal mines. Hazaribagh adjoins Manbhum and thousands of workers come on foot to the coal-field when they find themselves short of work; Monghyr and Gaya are readily accessible by rail. It is noticeable that the adjacent districts of Ranchi and Singhbhum are at present not utilized as sources of labour for the coal-field: the immigration into Manbhum from these two districts is on a small scale, being less than the movement in the opposite direction, and the females exceed the males showing that such migration as there is is casual. The districts which send their emigrants furthest afield in the province are Monghyr, Gaya and Shahabad, all of them in South Bihar which, being traversed by the "chord" and "grand chord" lines of the East Indian Railway, have the readiest access to such industrial centres as the province at present possesses.

EMIGRATION.

10. The following table shows the number of emigrants, *i.e.*, persons born in each district and enumerated outside it and the proportion born by this number to the actual population. The proportionate figures are illustrated in the map that follows the table:—

DISTRICT.	Number of emigrants.	Proportion per mille of actual population.
NORTH BIHAR.		
Saran	209,890	89.69
Champaran	46,462	23.93
Muzaffarpur	162,715	59.06
Darbhanga	126,810	43.52
Bhagalpur	171,651	84.40
Purnea	27,824	13.74
SOUTH BIHAR.		
Patna	132,914	84.43
Gaya	189,969	88.23
Shahabad	148,353	81.65
Monghyr	223,544	110.12
ORISSA.		
Cuttack	255,821	123.90
Balasore	83,277	84.93
Puri	56,587	59.46
CHOTA NAGPUR PLATEAU.		
Hazaribagh	147,535	115.53
Ranchi	348,172	260.91
Palamau	35,803	48.81
Manbhum	117,673	75.97
Singhbhum	100,849	132.78
Santal Parganas	297,913	165.63
Angul	25,489	139.61
Sambalpur	92,015	116.55
Orissa States	106,729	28.03
Chota Nagpur States	2,449	16.06



or its equivalent in kind in addition to free food, and a woman rather less. The emigrants have no definite promise of work when they set out but experience in previous years has shown them where work is likely to be available and there they wander about from one village to another cutting the crops as they are ready. Most family parties return with Rs. 20 or Rs. 30 saved as the result of three or four months' work. A further opportunity awaits the energetic labourer after he has assisted in sowing the fields of his native village in June and July, for a fresh demand for labour for weeding and cutting the jute crop in Purnea and Bengal arises in July and August, so that a fresh trip can be arranged between the sowing and cutting of the autumn and winter crops. Moreover, in districts of Bihar where the spring crops are not cultivated on a large scale and can be reaped by those who remain behind, the labourer will often stay away all through the hot weather until the rains break. Although therefore most of the labourers will be back by the end of April, some of them will stay away till the rains break. The Santal Parganas also sends out every year a large body of emigrants of this kind, who cross the Ganges and proceed on foot to the rice growing districts of Bengal. But crop-cutting in Northern Bengal represents only one and that not the most important of the occupations in which the North Bihar emigrants engage. The following statement shows their principal destinations: in the case of the three districts of Saran, Muzaffarpur and Darbhanga which send large numbers of persons to Calcutta and the neighbouring industrial districts, details are given for each of these destinations.

EMIGRANTS FROM NORTH BIHAR.

BIRTH DISTRICT.	PRINCIPAL PLACES WHERE ENUMERATED.							
	BENGAL.					UNITED PROVINCES.	ASSAM.	BURMA.
	TOTAL.	Calcutta.	24 Parganas.	Howrah.	Hughli.			
Saran	114,592	10,331	24,768	6,562	...	28,295	18,567	2,228
Champanan	17,077	...	...	...	10,477	2,350	2,871	253
Muzaffarpur	73,442	14,656	11,682	4,018	...	658	7,841	119
Darbhanga	43,533	7,793	5,436	2,572	4,677	504	3,030	9
Bhagalpur	38,434	...	...	...	1,908	95	2,756	579
Purnea	19,634	...	...	...	...	8	1,334	75

Regarding the occupations of the emigrants who make their way to Calcutta further information will be found in Subsidiary Table V. Trade, domestic service, work in mills and factories, as day labourers or carters are the occupations of the majority in the industrial areas. But emigration to Calcutta and its neighbourhood only accounts for about half the number of emigrants from North Bihar to Bengal. The rest are scattered over the province. The functional castes go to ply their proper businesses. Nuniyas do earth-work, Mallahs become boatmen on the rivers, Kahars carry *palkis*, Chamars and Mochis work as cobblers, and in addition to this most of the coolies on every railway platform in Bengal come from Bihar (or Orissa). In North Bihar the district which sends out the greatest number of emigrants to other provinces is Saran. There were 27,000 Saran emigrants in the contiguous districts of the United Provinces of whom 23,000 were females. Evidently this migration is casual in character. The great stream of emigration in which the males predominate goes further afield; for every hundred males enumerated in Saran district there were 13 Saran male emigrants enumerated outside the district and of these 10 had been drawn away by high wages to non-contiguous parts of other provinces or states. Yet the number of emigrants was less than it was ten years ago. It would be difficult to overestimate the economic and educative effect of this habit of migration and it is probably the chief of the causes that have resulted in Saran gaining the reputation of being ahead of the other districts of the division in prosperity and education. After Saran comes Muzaffarpur, but here though the population and its density are both greater, the stream of emigration to distant parts is little more than half what it is in the case of Saran; for every hundred males enumerated in the district, rather over 5

Muzaffarpur-born males were enumerated in other provinces. It is interesting however to note that Muzaffarpur sends more emigrants to Calcutta than does Saran. In the case of Darbhanga the proportion is less still, as only three males per cent. of the actual male population were enumerated outside the province. Bhagalpur still sends a high proportion of female emigrants out of the province, and is the only district in North Bihar where the stream of emigration has not declined: about 20,000 persons emigrated from the Banka subdivision just before the census. In Champaran and Purnea the emigration is less than the immigration and is of no special importance. In all 380,000 persons with a North Bihar birth-place were enumerated in other provinces.

14. In South Bihar also the periods of migration are correlated with the seasons. There is a considerable immigration of agricultural labour into South Bihar at different times of the year; thousands of immigrants come to cut the spring crops in the *tals* of Patna and Monghyr and immigrants come from the United Provinces and elsewhere to cut the paddy in Shahabad. Emigration also is regulated by the agricultural seasons. Emigrants who have land of their own to attend to usually return to their homes between June and October; those who have not usually make a point of returning to their homes for a couple of months in the hot weather: in such cases the women and children are left at home. Although the volume of emigration outside the province from the districts of South Bihar in no case comes up to that of Saran, the general standard is higher than in the case of North Bihar. The census showed that there had been a decrease of extra-provincial emigration from every district. The number of emigrants into the contiguous parts of the United Provinces showed a slight increase, but the number of emigrants to more remote destinations had decreased by 51,000: the decrease is not great in Gaya or Monghyr but Patna has sent 21,000 less emigrants out of the province than it did ten years ago and Shahabad 14,000 less. It will be noticed that the Shahabad-Burma connexion is still maintained. Two estates in the Pegu and Toungoo districts respectively were granted to Shahabad landlords some thirty years ago to stimulate migration, and the colonists are still there. South Bihar is traversed by the East Indian Railway and the call of Calcutta and the other industrial centres of Bengal and the coal-field is more clearly heard than in North Bihar. The following statement shows that the percentage of emigrants to Bengal who find their way to the metropolitan districts is higher in the case of South than in that of North Bihar:—

EMIGRANTS FROM SOUTH BIHAR.

BIRTH DISTRICT.	PRINCIPAL PLACES WHERE ENUMERATED.								
	BENGAL.					UNITED PROVINCES.	ASSAM.	CENTRAL PROVINCES.	BURMA.
	TOTAL.	Calcutta.	24 Parganaas.	Howrah.	Hughli.				
Patna	54,046	19,989	12,335	6,160	5,013	7,751	3,291	4,460	1,278
Gaya	73,816	38,038	13,986	5,612	4,502	10,924	8,044	712	352
Shahabad	64,242	16068	20,672	7,324	3,407	22,559	12,491	728	4,522
Monghyr	51,949	15,947	15,458	3,802	3,506	398	8,581	12	89

Subsidiary Table V shows that Gaya, which sends more emigrants to Calcutta than any other district of Bihar, specializes in day labourers, carters, domestic service and trade: in industrial work Shahabad is preeminent and in cobbling and shoe-making Shahabad and Monghyr.

15. The average of the remittances by money order to Shahabad, rather over Rs. 19, is higher than in the case of any other district in the province. Rajputs emigrate from this district in large numbers to occupy responsible and lucrative posts in the police or as darwans or sirdars. In Patna also the average value of the money order remittances, Rs. 16, is high; in Gaya and Monghyr, from which the emigrants usually come from a lower class such as Bhuiyas and Jolahas, the average of the remittances (Rs. 13-8-0) is distinctly lower.

16. Interesting information with regard to the occupations of these emigrants who seek industrial employment abroad is available from the industrial statistics of Bengal which it will be convenient to discuss under the head of South Bihar. The jute mills make no effort to recruit, the pay and conditions obtaining there being sufficient to attract labour automatically. The same is true of most industries in Bengal and enquiries in Saran and Shahabad, two of the most important recruiting districts of Bihar, showed that systematized recruitment for any industry was conspicuous for its absence and that recruiting *sirdars* were very much the exception. For porters on the other hand it appears that there is some recruitment. The number of labourers who are employed departmentally by the Calcutta Port Commission is not great, but most of them come from Bihar. Unskilled labourers are now paid by the Commission at the rate of Rs. 17 or Rs. 18 a month: their railway fares are advanced in the first instance and then recovered from their earnings. The largest recruiter of labour of this description in Bengal is however probably Messrs. Bird and Company who are the labour contractors for the Port Commission and also for a number of important railway termini such as Goalando and Chandpur. The labour force supplied by them for these purposes varies from 7,500 in March to 10,000 in September and October, and nearly all of it is recruited from Bihar and Orissa through *sirdars*. Labourers employed as porters in Calcutta by this firm earn from Rs. 20 a month in the case of the weakest to Rs. 45 and Rs. 60 a month in the case of those who carry heavy weights: at railway stations in the *mufassal* the rates are 30 or 50 per cent. lower. Most of the labourers get free quarters and concessions with regard to railway fares in addition to their pay. Subsidiary Table VI shows the distribution of skilled and unskilled workers in the industrial establishments of Bengal according to their Natural Division of origin in this province. North Bihar sends most skilled and fewest unskilled workers. The Chota Nagpur Plateau on the other hand sends by far the greatest number of unskilled and by far the smallest number of skilled workers. The skilled workers in the jute mills come mostly from Bihar and the unskilled from Bihar and Orissa but not to any extent from Chota Nagpur. The ordinary unskilled day labourers also are drawn in large numbers from every part of the province except Chota Nagpur. The great flood of unskilled labour from Chota Nagpur goes to the tea-gardens and the collieries in Raniganj.

17. While the amount of emigration from Bihar has generally decreased, that from Orissa has vastly increased. For every hundred males enumerated in Cuttack 18·2 males born in the district were enumerated outside; in Balasore the percentage is 11·4 and in Puri 7·0. The casual emigration from Puri into Ganjam has slightly increased while that from Balasore into Midnapur is about the same as it was. The great difference is found in the amount of emigration to non-contiguous part of other provinces: to such destinations Cuttack has sent out 84,000, Balasore 13,000 and Puri 17,000 more emigrants than in 1911, the great majority being males. The destination of these emigrants is shown in the following statement:—

EMIGRANTS FROM ORISSA.

BIRTH DISTRICT.	PRINCIPAL PLACES WHERE ENUMERATED.							
	BENGAL.					ASSAM.	MADRAS.	BURMA.
	TOTAL.	Calcutta.	24 Parganas.	Howrah.	Hughli.			
Calcutta	114,890	21,720	37,472	16,371	8,995	67,188	5,378	1,240
Balasore	47,015	12,151	13,785	6,134	3,864	5,558	85	740
Puri	16,388					5,353	4,556	4,081

18. With regard to the emigrants to Bengal who take up industrial pursuits something has already been said. Most of the Orissa emigrants to Bengal

find their way to Calcutta or its neighbourhood where in addition to industrial occupations they take up work in large numbers as day labourers or in domestic service. The number of male emigrants from Cuttack enumerated in Calcutta was greater than the number from any other district in the province.

Number of persons sent from Orissa to the Assam tea-gardens.

1915-16	...	...	...	32,000
1916-17	...	...	...	5,000
1917-18	...	...	...	2,000
1918-19	...	...	...	51,000
1919-20	...	...	...	12,000

A considerable number also go to cultivate rice in Bengal or, in the case of Puri, to Burma for others in more affluent circumstances than themselves and the Oriya Brahman cook is in general request. The emigration to Assam which is of a more permanent character received a great stimulus in 1919. The number of persons despatched to the Assam tea-gardens in the last five years of the decade from Cuttack and Balasore is shown in the margin, but of these a considerable number came from the Feudatory States.

19. The great development of emigration is an indication of the hard times that Orissa has passed through since 1918 and also shows how it was that a repetition of the tragedy of 1866 was avoided. It would be difficult to over-estimate the number of lives saved by the east coast route of the Bengal-Nagpur Railway in the last years of the decade by bringing food to the people and, even more important, by taking the people to places where work and food could be found. It may be added that the average of the money order remittances to Cuttack and Balasore, the most important recruiting districts in Orissa, is small, being between Rs. 10 and Rs. 11. A certain type of Oriya emigrant, notably bearers from Balasore, has been known to make fortunes but the great majority of the emigrants work in less exalted capacities and are not in a position to make heavy remittances to their homes.

20. From the Chota Nagpur Plateau the most important streams of emigration out of the province are to Assam and to the Barind. The

FROM THE CHOTA NAGPUR PLATEAU.

emigration of labourers to the tea-gardens in the Duars is without restriction and a large number of aboriginals or semi-aboriginals from the Santal Parganas and Chota Nagpur proper go there every year, usually for short periods of from two to six months. In 1918-19 the Tea Districts Labour Association recruited 28,000 persons for the Duars in Ranchi alone and at the census 126,214 natives of Ranchi were enumerated in the district of Jalpaiguri. The recruitment for the tea-gardens of Assam is on a larger scale and is carried out through a carefully organized system under Government supervision. This emigration is not periodic except in the sense that labourers are most willing to leave their homes when work is slack, that is to say in February, March or April. A labourer usually goes off to Assam without his family in the first place to have a look round. If he likes the life only moderately he will stay and work there for a year or two until he has saved as much as he wants. If he definitely likes the life he will probably return in a few weeks and fetch his family. The men are encouraged to take their families with them and when they go *en famille* they usually go for a period of from 2 to 5 years, though some of them settle permanently in Assam. The result is that the proportion of males and females who emigrate to Assam is about equal. The stream of course varies in volume from year to year in accordance with the

Persons recruited for the Assam tea-gardens in the Chota Nagpur Plateau.

1915-16	...	...	...	55,000
1916-17	...	...	...	22,000
1917-18	...	...	...	9,000
1918-19	...	...	...	143,000
1919-20	...	...	...	42,000

economic condition of the home districts. The number of "souls", *i.e.*, adults and dependants, recruited in the Chota Nagpur Plateau during the last five years of the decade is shown in the margin. The figure for 1918-19 is remarkable, and shows how the population of even the most inaccessible tracts is learning to escape from the grip of scarcity by emigration. Half of the people recruited in that year came from Ranchi, including the states of Surguja, Jashpur and Gangpur, and many of them must have had a tramp of several days before

they reached the railway. The next heaviest recruiting district for the tea-gardens is Manbhum, which in 1918-19, in spite of the demand for labour in the coal-field, sent 23,000 persons to Assam. Singhbhum is a less important recruiting district than it was owing to the growth of local industries. A fair number of emigrants come from Hazaribagh, which sends labourers also to the coal-field and the mica mines, and from Sambalpur and Palamau where

ENUMERATED IN	Persons born in Santal Parganas.	SANTALS.	
		1921.	1911.
Bogra	3,308	7,182	3,545
Rajshahi	15,081	21,300	13,667
Dinajpur	53,350	120,211	74,381
Malda	38,011	72,140	48,402
ASSAM	40,171	84,138	59,008

a good many recruits are obtained from the neighbouring states. The other important stream of migration outside the province from the Chota Nagpur Plateau is that of the Santals from the Santal Parganas eastwards into the so-called Barind, consisting of the districts of Dinajpur, Malda, Rajshahi and Bogra,

and to Assam. Statistics are given in the margin of the number of natives of the Santal Parganas and of Santals enumerated in these districts. It will be noticed that the number of Santals in these districts is increasing rapidly and, the number being far in excess of the number of persons born in the Santal Parganas and the stream of emigration from the Santal Parganas showing signs of being stayed, it is clear that they are making permanent homes for themselves. Of the Santals in Assam about 70 per cent. are tea-garden coolies and the remainder are on the mission colony at Goalpara. The chief destinations of the emigrants from the Chota Nagpur Plateau are given in the following table:—

EMIGRANTS FROM THE CHOTA NAGPUR PLATEAU.

BIRTH DISTRICT.	WHERE ENUMERATED.		
	Bengal.	Assam.	Central Provinces.
Hazaribagh	31,908	54,310	347
Ranchi	164,060	134,303	2,232
Palamau	3,337	15,661	1,067
Manbhum	32,925	63,606	12
Singhbhum	16,408	32,681	6
Santal Parganas	202,444	40,171	...
Angul	6	2,099	4
Sambalpur	1,228	25,876	6,871
Orissa States	7,171	35,074	11,665
Chota Nagpur States	10	3	...

21. The emigration from the Chota Nagpur Plateau to non-contiguous parts of other provinces has greatly increased in the last ten years, dating no doubt from the scarcity of 1918-19. There has been no increase of emigration from Hazaribagh to these parts, owing probably to industrial developments in the district, to increased emigration to Manbhum and to the severity of the influenza epidemic. The decrease in emigration from the Santal Parganas has already been mentioned: in the case of Sambalpur and the Orissa States the decrease is owing to the fact that the scarcity in Chattisgarh had set the tide of migration flowing strongly in an easterly direction. In the case of other districts there has been an increase which in Ranchi is remarkable and amounts to no less than 69,000 persons: 299,000 persons born in Ranchi, of whom 157,000 were males and 142,000 were females, were enumerated in non-contiguous parts of other provinces. If all classes of emigrants are added together they represent on this occasion more than a quarter of the actual population of the district.

SUBSIDIARY TABLE II.—EMIGRATION (ACTUAL FIGURES).

ENUMERATED IN (000'S OMITTED).																	
DISTRICT (OR NATURAL DIVISION).			CONTIGUOUS DISTRICTS IN PROVINCE.			OTHER PARTS OF PROVINCE.			CONTIGUOUS PARTS OF OTHER PROVINCES, ETC.			NON-CONTIGUOUS PARTS OF OTHER PROVINCES, ETC.			OUTSIDE INDIA.		
PERSONS.	MALES.	FEMALES.	PERSONS.	MALES.	FEMALES.	PERSONS.	MALES.	FEMALES.	PERSONS.	MALES.	FEMALES.	PERSONS.	MALES.	FEMALES.	PERSONS.	MALES.	FEMALES.
2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
BIHAR AND ORISSA																	
37,540	18,500	19,034	...	...	...	...	...	...	637	330	307	1,318	917	401	...	...	...
NORTH BIHAR																	
13,740	6,787	6,953	75	20	46	20	13	8	105	60	45	275	234	41	...	...	...
2,895	1,110	1,775	31	10	16	15	11	4	27	4	23	137	117	20	...	...	...
1,870	938	932	20	4	10	3	1	1	2	...	3	21	10	3	...	...	...
2,690	1,307	1,383	66	18	36	19	13	6	...	...	...	42	73	9	...	...	...
2,845	1,307	1,538	30	10	20	18	13	6	...	...	...	43	43	6	...	...	...
1,950	975	975	124	60	69	3	3	1	...	...	...	46	27	13	...	...	...
1,831	831	800	4	2	3	2	1	1	17	...	0	4	2	3	...	...	...
SOUTH BIHAR																	
7,440	3,727	3,713	101	42	59	113	71	42	30	6	24	353	241	92	...	...	...
1,488	771	717	48	14	34	12	8	4	...	...	...	72	47	20	...	...	...
2,108	1,069	1,040	39	24	34	32	21	11	...	...	...	96	60	20	...	...	...
1,768	863	866	23	10	13	20	13	7	19	5	15	82	61	36	...	...	...
1,868	930	979	52	20	63	50	30	20	...	...	...	91	68	33	...	...	...
ORISSA																	
3,945	1,854	2,091	63	24	39	11	8	3	23	11	19	252	201	51	...	...	...
2,051	943	1,089	56	23	33	9	7	2	...	...	...	191	144	47	...	...	...
962	465	497	38	8	20	2	1	1	8	4	4	40	41	6	...	...	...
915	443	473	34	7	17	14	11	3	4	1	3	27	23	4	...	...	...
CHOTA-NAGPUR PLATEAU																	
11,944	5,917	6,027	...	...	...	...	...	...	170	83	87	728	387	241	...	...	...
1,241	606	635	57	31	36	3	3	1	...	...	...	87	63	35	...	...	...
1,307	647	660	44	21	23	3	3	1	2	1	1	299	197	131	...	...	...
702	363	360	11	4	7	13	9	4	3	1	2	21	11	10	...	...	...
1,896	704	611	18	6	13	3	3	1	25	10	15	42	37	23	...	...	...
833	396	346	20	22	28	2	2	1	...	...	...	43	30	23	...	...	...
1,719	823	896	50	23	38	7	5	2	101	53	40	141	70	65	...	...	...
936	454	482	34	12	20	11	7	4	...	...	...	34	17	17	...	...	...
936	454	482	34	12	20	11	7	4	6	3	4	34	17	17	...	...	...
3,553	1,727	1,796	56	23	35	4	3	3	...	...	...	45	23	23	...	...	...
143	71	73	5	2	8	012	007	005	...	...	...	2	1	1	...	...	...

Note.—This figure for Bihar and Orissa include 87,818 persons (22,790 males and 14,028 females) who returned their birth-places as Bihar and Orissa without further specification. The figures for Orissa include 103 persons (83 males and 21 females) who returned their birth-places simply as Orissa and those for the Chota Nagpur Plateau include 875 persons (431 males and 444 females) whose birth-place was returned either as Chota Nagpur or as Bihar and Orissa States. These figures are not included in those of the individual districts.

SUBSIDIARY TABLE III.—MIGRATION BETWEEN NATURAL DIVISIONS
(ACTUAL FIGURES) COMPARED WITH 1911.

NATURAL DIVISION IN WHICH BORN.	NUMBER ENUMERATED (000'S OMITTED) IN NATURAL DIVISION.				
	North Bihar.	South Bihar.	Orissa.	Chota Nagpur Plateau.	Total.
1	2	3	4	5	6
Total ... { 1921 ... 268 { 1911 ... 311	134	53	439	893	
North Bihar ... { 1921 ... [13,740] { 1911 ... [13,792]	65	327	37	96	
South Bihar ... { 1921 ... 101 { 1911 ... 131	[7,440]	[7,609]	405	113	214
Orissa ... { 1921 ... 264 { 1911 ... 262	515	[3,945]	73	74	
Chota Nagpur Plateau ... { 1921 ... 46 { 1911 ... 38	19	23	[11,944]	87	
Outside Province ... { 1921 ... 121 { 1911 ... 143	47	29	326	422	
	62	3	224	450	

SUBSIDIARY TABLE IV.—MIGRATION BETWEEN THE PROVINCE AND OTHER PARTS OF INDIA.

PART I.—TOTAL.

PROVINCE OR STATE.	IMMIGRANTS TO—			EMIGRANTS FROM—			EXCESS (+) OR DEFICIENCY (—) OF IMMIGRANTS OVER EMIGRANTS.	
	1921.	1911.	Variation.	1921.	1911.	Variation.	1921.	1911.
1	2	3	4	5	6	7	8	9
Ajmer Merwara ...	133	143	— 11	335	112	+ 223	— 308	+ 31
Andamans and Nicobars ...	4	13	— 9	1,473	880	+ 593	— 1,408	+ 873
Assam ...	699	3,142	— 2,443	570,642	398,664	+ 171,778	— 569,760	+ 305,732
Do. States ...	57	30	+ 27	503	503	—	— 67	+ 433
Baluchistan ...	44	19	+ 25	150	62	+ 88	— 106	+ 43
Do. States ...	3	...	+ 3	...	1	+ 1	— 3	+ 1
Baroda State ...	153	108	+ 45	42	150	— 108	+ 111	+ 43
Bengal ...	116,660	105,333	+ 11,327	1,267,225	1,233,943	+ 33,282	— 1,050,408	+ 1,068,610
Do. States ...	63	61	+ 2	20,339	18,428	+ 1,911	— 20,277	+ 18,377
Bombay (including Aden) ...	4,227	2,202	+ 2,025	3,065	876	+ 2,189	— 1,162	+ 1,336
Do. States ...	2,650	1,223	+ 1,427	596	330	+ 266	— 1,964	+ 849
Burma ...	217	173	+ 44	20,616	5,392	+ 15,224	— 20,399	+ 8,219
Central India Agency ...	3,158	3,610	— 452	708	1,115	— 407	+ 1,450	+ 2,495
Central Provinces and Berar ...	63,617	38,455	+ 25,162	14,665	99,674	— 84,909	+ 43,253	+ 60,219
Do. States ...	14,606	14,181	+ 425	17,674	29,924	— 12,250	+ 3,368	+ 15,743
Coorg ...	1	5	— 4	...	3	+ 3	— 1	+ 2
Hyderabad ...	349	204	+ 145	580	17	+ 563	— 231	+ 187
Kashmir ...	384	83	+ 301	32	79	— 47	+ 333	+ 4
Madras ...	35,827	35,459	+ 368	17,039	1,401	+ 15,631	— 15,565	+ 34,068
Do. States (including Cochin and Travancore) ...	99	19	+ 80	5	27	— 22	+ 94	+ 6
Cochin ...	29	3	+ 26	...	25	— 25	— 29	+ 22
Travancore ...	64	16	+ 48	...	9	+ 3	+ 69	+ 14
Mysore ...	347	204	+ 143	101	59	+ 42	+ 249	+ 145
North West Frontier Province ...	281	351	— 70	129	23	+ 107	+ 152	+ 329
Ditto (agencies and tribal areas) ...	49	...	+ 49	...	3	+ 3	— 43	+ 2
Punjab ...	7,278	4,883	+ 2,395	651	1,191	— 540	+ 6,637	+ 3,692
Do. States ...	579	416	+ 163	28	254	— 226	+ 551	+ 161
Rajputana Agency ...	18,512	15,168	+ 3,344	333	393	— 60	+ 18,479	+ 14,790
Sikkim ...	13	13	—	...	159	— 159	+ 13	+ 177
United Provinces of Agra and Oudh ...	115,698	123,504	— 7,806	78,383	105,061	— 26,678	+ 39,306	+ 18,743
Do. States ...	209	439	— 230	1,811	20	+ 1,791	— 1,105	+ 410
Total British Territory ...	344,268	374,013	— 29,745	1,912,308	1,849,487	+ 62,821	— 1,568,040	+ 1,475,475
Total Indian States ...	40,606	35,763	+ 4,843	42,219	51,546	— 9,327	+ 1,613	+ 15,783
French Settlements ...	78	80	— 2	...	...	...	+ 78	+ 80
Portuguese Settlements ...	47	9	+ 38	...	...	...	+ 47	+ 9
India (unspecified) ...	263	44	+ 219	...	...	...	+ 263	+ 44

SUBSIDIARY TABLE IV.—MIGRATION BETWEEN THE PROVINCE AND OTHER PARTS OF INDIA—(continued).

*** PART IIA.—BRITISH TERRITORY.**

PROVINCE OR STATE.	IMMIGRANTS TO—			EMIGRANTS FROM—			EXCESS (+) OR DEFICIENCY (—) OF IMMIGRANTS OVER EMIGRANTS.	
	1921.	1911.	Variation.	1921.	1911.	Variation.	1921.	1911.
2	2	3	4	5	6	7	8	9
Ajmer Merwara ...	129	141	— 12	385	112	+ 273	— 200	+ 29
Andamans and Nicobars ...	4	13	— 9	1,473	873	+ 601	— 1,469	+ 869
Assam ...	632	3,185	— 2,303	535,695	392,698	+ 142,997	— 534,763	+ 389,503
Do. States ...	55	20	+ 35	...	503	— 448	+ 55	— 483
Baluchistan ...	42	15	+ 27	150	92	+ 58	— 108	+ 47
Do. Agency tracts ...	3	...	+ 3	...	1	— 1	+ 3	— 1
Baroda State ...	107	99	+ 8	42	190	— 148	+ 65	— 61
Bengal ...	107,180	153,361	— 46,171	1,201,751	1,229,081	— 27,330	— 1,093,571	+ 1,076,630
Do. States ...	62	49	+ 13	19,075	18,440	+ 635	— 19,613	+ 18,371
Bombay (including Aden) ...	3,225	1,885	+ 1,340	1,065	757	+ 308	— 2,760	+ 1,126
Do. States ...	2,403	340	+ 1,014	167	368	— 201	— 2,206	+ 491
Burma ...	146	155	— 9	20,189	5,892	+ 11,787	— 20,043	+ 8,237
Central India Agency ...	1,790	3,076	— 1,286	703	1,047	— 344	+ 1,082	— 3,029
Central Provinces and Berar ...	45,685	19,743	+ 26,142	10,683	93,785	— 83,102	— 35,202	+ 74,042
Do. States ...	9,806	7,583	+ 1,823	14,585	20,201	— 14,400	— 6,079	+ 21,408
Coorg ...	1	5	— 4	...	2	— 1	+ 1	— 3
Hyderabad ...	327	193	+ 134	580	17	+ 563	— 253	+ 176
Kashmir ...	311	81	+ 230	32	70	— 38	+ 279	— 2
Madras ...	19,238	16,795	+ 2,443	17,032	438	+ 16,606	— 2,200	+ 16,369
Do. States (including Cochin and Travancore) ...	96	10	+ 77	5	27	— 22	+ 91	— 8
Cochin ...	29	5	+ 24	...	25	— 26	+ 29	— 22
Travancore ...	67	16	+ 51	5	2	+ 3	+ 56	— 44
Mysore ...	333	190	+ 143	101	59	+ 42	— 233	+ 151
North West Frontier Province ...	266	321	— 55	129	22	+ 107	— 127	+ 269
Ditto (Agencies and tribal areas) ...	33	...	+ 33	...	2	— 2	+ 33	— 2
Punjab ...	6,272	4,085	+ 2,187	645	1,147	— 502	+ 5,627	— 2,630
Do. States ...	446	370	+ 76	23	354	— 331	+ 418	— 116
Rajputana Agency ...	17,050	13,662	+ 3,388	330	318	+ 12	— 16,720	+ 13,354
Sikkim ...	13	13	—	...	189	— 176	+ 13	— 177
United Provinces of Agra and Oudh ...	114,638	122,104	— 7,476	76,381	101,903	— 25,522	— 36,237	+ 17,111
Do. States ...	196	437	— 241	1,311	20	+ 1,291	— 1,115	+ 417
Total British Territory ...	298,438	321,747	— 23,309	1,864,398	1,535,249	+ 31,149	— 1,565,960	+ 1,511,502
Total Indian States ...	33,100	26,930	+ 6,170	37,864	50,825	— 12,961	— 4,764	+ 23,895
French Settlements ...	74	79	— 5	...	...	...	+ 74	— 79
Portuguese Settlements ...	47	9	+ 38	...	...	...	+ 47	— 9
India (unspecified) ...	198	44	+ 154	...	...	...	+ 198	— 44

PART IIB.—BIHAR AND ORISSA STATES.

PROVINCE OR STATE.	IMMIGRANTS TO—			EMIGRANTS FROM—			EXCESS (+) OR DEFICIENCY (—) OF IMMIGRANTS OVER EMIGRANTS.	
	1921.	1911.	Variation.	1921.	1911.	Variation.	1921.	1911.
1	2	3	4	5	6	7	8	9
Ajmer Merwara ...	3	2	+ 1	...	...	...	+ 3	— 2
Andamans and Nicobars ...	...	...	...	...	14	— 14	— 35,017	+ 6,159
Assam ...	60	7	+ 53	35,077	6,189	+ 28,811	— 35,017	+ 6,159
Do. States ...	2	...	+ 2	...	...	...	+ 2	— 4
Baluchistan ...	2	4	— 2	...	...	...	+ 2	— 4
Do. Agency tracts ...	...	...	...	...	...	...	...	...
Baroda State ...	46	9	+ 37	...	...	...	+ 46	— 9
Bengal ...	2,650	11,982	— 9,332	6,517	2,962	+ 3,555	— 3,163	+ 8,020
Do. States ...	2	2	—	694	8	+ 686	— 694	+ 8
Bombay (including Aden) ...	402	318	+ 84	2,000	119	+ 1,881	— 1,981	+ 300
Do. States ...	327	380	— 53	699	13	+ 687	— 319	+ 398
Burma ...	71	13	+ 58	427	...	...	+ 427	— 13
Central India Agency ...	368	534	— 166	...	68	+ 300	— 368	+ 493
Central Provinces and Berar ...	16,832	12,712	+ 4,120	3,888	4,850	— 962	+ 13,050	— 13,633
Do. States ...	4,700	6,298	— 1,598	2,989	633	+ 2,356	— 1,711	+ 5,685
Coorg ...	...	...	...	...	1	— 1	...	+ 1
Hyderabad ...	22	11	+ 11	...	...	...	+ 22	— 11
Kashmir ...	53	2	+ 51	...	...	...	+ 53	— 2
Madras ...	16,630	18,694	— 2,064	...	...	...	+ 16,630	— 17,719
Do. States (including Cochin and Travancore) ...	3	...	+ 3	...	975	— 975	+ 3	—
Cochin ...	...	...	...	...	...	...	...	...
Travancore ...	8	...	+ 8	...	...	...	+ 8	—
Mysore ...	14	14	—	...	...	...	+ 14	— 14
North West Frontier Province ...	26	30	— 4	...	...	...	+ 26	— 30
Do. (Agencies and tribal areas) ...	15	...	+ 15	...	...	...	+ 15	—
Punjab ...	1,006	797	+ 209	6	44	— 38	+ 1,000	— 753
Do. States ...	123	45	+ 78	...	...	...	+ 123	— 45
Rajputana Agency ...	1,752	1,536	+ 216	3	...	...	+ 1,750	— 1,536
Sikkim ...	...	...	...	...	...	...	...	...
United Provinces of Agra and Oudh ...	280	1,700	— 1,420	1	68	— 67	+ 280	— 1,632
Do. States ...	10	2	+ 8	...	...	...	+ 10	— 2
Total British Territory ...	45,830	52,265	— 6,435	47,910	16,229	+ 31,679	— 2,080	+ 36,027
Total Indian States ...	7,606	8,533	— 1,327	4,385	721	+ 3,664	+ 3,181	+ 18,112
French Settlements ...	4	1	+ 3	...	...	...	+ 4	— 1
Portuguese Settlements ...	...	...	...	...	...	...	...	...
India (unspecified) ...	84	...	+ 84	...	...	...	+ 84	—

SUBSIDIARY TABLE V.—OCCUPATIONS OF EMIGRANTS FROM CERTAIN DISTRICTS OF BIHAR AND ORISSA TO CALCUTTA.

Born in	Total immigrants.		Dependents.		Occupations of actual workers.												Cobblers and shoemakers.	
	Males.	Females.	Males.	Females.	Traders.		Domestic service.		Work in mills and factories.		Day labourers and coolies.		Carters.		Work in docks and ships.			
					Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.			Males.	Females.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Saran	15,080	2,433	1,010	1,748	1,037	64	1,003	75	2,114	195	2,155	65	1,038	5	205	...	155	...
Muzaffarpur	10,263	1,864	1,123	1,361	1,789	64	1,617	69	1,671	90	4,187	73	1,631	3	113	1	740	1
Darbhanga	9,354	701	488	508	725	24	630	35	343	14	8,617	98	635	...	383	...	373	1
Patna	20,403	7,242	2,336	5,310	2,732	280	2,027	438	1,454	286	4,243	275	645	0	373	6	897	11
Gaya	38,657	9,003	3,360	7,140	3,950	353	5,306	580	2,505	207	7,430	508	2,747	14	409	6	684	8
Shahabad	20,024	5,009	1,747	4,673	1,523	144	1,432	133	2,822	250	2,310	301	616	12	317	3	2,698	7
Monghyr	17,706	2,727	1,107	1,073	1,235	93	1,255	86	1,108	189	6,316	136	603	1	368	...	2,575	7
Cuttack	41,011	2,612	2,006	1,484	2,409	78	8,818	420	5,174	58	9,872	41	103	...	771	5	64	2
Balasore	16,092	785	609	372	1,263	33	2,423	154	1,301	22	4,055	17	95	...	1,083	...	31	...

SUBSIDIARY TABLE VI.—BIRTH-PLACE OF SKILLED AND UNSKILLED WORKERS IN INDUSTRIAL ESTABLISHMENTS IN BENGAL.

1	BORN IN			
	North Bihar.	South Bihar.	Chota Nagpur Plateau.	Orissa.
2	3	4	5	
INDUSTRIAL ESTABLISHMENTS OF ALL KINDS.				
Total skilled	27,120	24,779	2,427	12,524
Total unskilled	36,099	63,977	1,22,942	51,766
JUTE MILLS.				
Total skilled	25,088	19,597	1,031	8,762
Spinning	2,563	5,764	328	1,521
Winding	2,828	2,827	155	1,509
Beaming and dressing	280	125	147	2,875
Wearing	15,881	6,708	229	1,095
Finishing	2,258	2,273	40	311
Total unskilled	15,954	29,607	2,358	23,218
RAILWAY WORKSHOPS.				
Total skilled	1,210	1,996	104	786
Total unskilled	843	981	227	680
COLLIERIES.				
Total unskilled	431	2,253	12,128	18
TEA GARDENS.				
Total unskilled	1,918	1,370	99,966	950
STEAMER AND RAILWAY COOLIES.				
Total unskilled	3,676	4,879	2,325	1,324
DAY LABOURERS AND COOLIES.				
Total unskilled	11,538	21,386	2,254	18,366

CHAPTER IV.

RELIGION.

THE distribution of the population by religion is given in Imperial Table VI. There are four Subsidiary Tables at the end of this chapter, as follows:—

Subsidiary Table I.—General distribution of the population by religion.

Subsidiary Table II.—Distribution by districts of the main religions.

Subsidiary Table III.—Christians: number and variations.

Subsidiary Table IV.—Religion of urban and rural population.

2. Before considering the statistics in detail it is necessary to say a few words by way of definition of the religions for which statistics are given in these tables and to explain the difficulties experienced in obtaining a correct return. No attempt will be made to enter at any length into the question of what constitutes the essence of Hinduism or any other religion, but it is necessary in discussing the statistics to give some idea of what is included under each head. The opportunity will also be taken to mention one or two interesting religious movements which have occurred in the last decade.

HOW FAR RELIGIONS ARE
MUTUALLY EXCLUSIVE.

3. The instructions given to the enumerators were that they should record the religion which each person returned, such as Hindu, Musalman, Sikh, Jain, Christian or Parsi: in the case of Christians the sect was also to be entered below the religion; and in the case of aboriginal tribes who were not Hindus, Musalmans, Christians, etc., the name of the tribe. In some cases when the distinction between one religion and another is clear cut there is no difficulty in following these instructions: a Muhammadan for instance is a person who believes that there is no God but Allah and that Muhammad is his prophet, the main and ultimate channel whereby the will of the Creator of the world has been revealed to mankind. In Bombay it is said that in the case of the Kabirpanthis the line of distinction between Muhammadan and Hindu is obscure and that some Kabirpanthis return themselves as Muhammadans and others as Hindus. In this province Muhammadans join in Hindu festivals and Hindus join in Muhammadan festivals and there has been some inter-change of customs. In Purnea there is attached to the house of nearly every low class Muhammadan a *khudai ghar* in which prayers are offered both to Allah and to Kali: Muhammadans in that district employ Hindu Ojhas in sickness and get Hindus to make offerings on their behalf to Hindu deities, yet if a person is a Muhammadan there is no possibility of his being mistaken for anything else. Again, conversion to Christianity theoretically involves the acceptance of a definite creed and is signalized by baptism, and in most cases there is no difficulty in distinguishing between Christian and non-Christian. The Muhammadans regard Christ as a prophet but there is never any doubt as to who is a Christian and who is a Muhammadan. But there are cases, particularly amongst the aboriginals of Chota Nagpur, where Christian converts fall away gradually so that while the missionaries still claim them as belonging to the fold their non-Christian neighbours regard them as of the same persuasion as themselves. In some cases indeed there is a public renunciation of Christianity such as takes place in the *jomjati* ceremony in the Santal Parganas; but this is not always so and it is probable that the difference which is always found between the mission figures and the census figures is partly to be accounted for in this way. In Shahabad it is reported that the number of Christian converts was understated at the census owing to the unwillingness of the Hindu enumerators to record them as such; but this was a case of deliberate misrepresentation and does not prove that it is difficult to distinguish the Christians from the followers of other religions.* Similarly with the Parsis and the Jews; these

* See footnote to paragraph 25.

religions are quite apart from those of the great mass of the population and there is no difficulty in distinguishing those who profess them.

4. In the case of all the other religions there is one main underlying difficulty, namely the difficulty of saying where Hinduism begins or ends, for all these religions represent either off-shoots from Hinduism or the great outlying mass of tribal religions from which by insensible degrees

IMPOSSIBILITY OF DEFINING
HINDUISM.

converts to Hinduism are continually being recruited. The first difficulty that is experienced in deciding who is and who is not a Hindu arises from the fact that to the minds of a large part of the population the word "religion" used in this sense is unintelligible. The term "dharma", which is used as its equivalent in the Hindu census schedules, has been defined as meaning "established order, usage, institution, custom, prescription: rule, duty; virtue, moral merit, good works; right, justice, law". This is sufficiently comprehensive but clearly the word has not the same meaning or at any rate the same associations as the English word "religion". The word "religion" as used in a census schedule, where one religion is to be distinguished from another and emphasis is laid on its formal aspect, suggests to a western mind a certain definite body of belief, probably crystallized in a creed, and certain definite observances; so that any person who accepts those beliefs and adopts those observances can be regarded as a follower of that religion. To a Hindu "Hinduism is that which a Hindu does"; his "dharma" is his tradition of right living. Right living no doubt involves right thinking and the necessity of ensuring right thinking may result in the formulation of a creed; but in the case of Hinduism this necessity has not been felt and on the practical side also Hinduism is conspicuously lacking in uniformity and definition. It embraces everything from the lowest form of propitiation of local spirits to the loftiest system of philosophy. All attempts hitherto to define the essence of Hinduism except in the vaguest terms have been proved open to objection and a problem which has defeated the life-long student is not likely to be solved on uniform and satisfactory lines by the census enumerators. "A Hindu", says a modern Hindu writer*, "should be born of parents not belonging to some recognized religion other than Hinduism, marry within the same limits, believe in God, respect the cow and cremate the dead". So far as this province is concerned this definition omits what is perhaps the decisive characteristic of the Hindu, namely reverence for the Brahman. When the aboriginal's thoughts turn towards Hinduism the first thing he does is to seek out some Brahman priest, genuine or otherwise, to assist him in taking part in the Hindu rites and his claims to be a Hindu would generally be assessed by the genuineness of the Brahman whom he employs and by the treatment which the Brahman is prepared to extend to him. The fact that he continues to perform his tribal ceremonies is perfectly consistent with his regarding himself and with his being regarded by others as a Hindu: his relations with the Brahmans are the decisive factor. With this reservation and with the further reservation that for the great mass of the Hindus in this province, belief in God means belief in a number of gods the above description is probably as good as can be given in a few words of what is connoted by the term "Hindu" in the census schedules.

5. The Brahmo Samaj was the first result of the impact of European on Hindu thought, and grew out of an alliance that failed between Raja Rammohan Roy and the Rev. W. Adam of the Unitarian Church. The first church was opened in Calcutta in 1830 and the greater number of the Brahmos are still to be found in that neighbourhood. Ten years ago 585 Brahmos were enumerated in this province and during the last ten years the number has risen to 794. Of these over 25 per cent. were born outside the province and over 20 per cent. were born in Bengal. The most important centres of the Samaj in this province are Cuttack, Muzaffarpur, Ranchi, Patna and Bhagalpur. The Sadharan Brahmo Samaj, the section to which most Brahmos belong, is open to those who are prepared to give up caste and use Brahmo rites at their domestic ceremonies. Nevertheless some of the Brahmos at the census returned themselves as belonging to one or other of the castes amongst

BRAHMO SAMAJ.

* Punjab Census Report, 1911.

which Brahmans, Kayasths and some of the trading castes were most common. The appeal of the Samaj is to the intellectual classes. The conditions that led to its foundation have become more acute since that day and it might have been supposed that the number of Brahmos would have increased rapidly. The movement however has never taken deep root in this province and seems to have been checked by the revival within the Hindu fold and the declining rigidity of the caste system, thoughtful men finding that there is scope within the four corners of Hinduism for both spiritual religion and social reform.

6. The other great reforming sect of recent times, the Arya Samaj, which was founded in Northern India five years before the Brahmo Samaj was founded in Calcutta, has a larger number of adherents in the province. Ten years ago the number was 4,085; now it is 4,578. Most of them are to be found in the Dinapore subdivision of Patna district. The Aryas are in much closer touch with orthodox Hinduism than the Brahmos, and comparatively few of them have broken caste. In Patna 826 of the Aryas returned themselves as Goals by caste, 545 as Kurmis, 514 as Kahars, and numerous others as Koiris, Barhis and Dosadhs, but practically all the common castes are represented from Brahmans to Dhobis.

7. The Jain and the Buddhist religions, the history of which is closely connected with Bihar, originated in revolts against Brahmanic Hinduism and it might be supposed that the very fact that they developed locally in opposition to Hinduism would have kept them alive to this day. In Bihar Buddhism as an indigenous religion is dead; a prophet must not expect to be honoured in his own country. The religion is represented by a few scattered foreigners who visit the province on business or on pilgrimage and whatever of Hindu belief and practice may have been introduced into the Buddhism of Nepal, the religion of the Buddhist foreigners is something quite distinct from the circumambient Hinduism and there is no difficulty in drawing the line of division between the two. In the case of the Buddhists of Orissa the line is by no means so clear. Buddhists were enumerated in the states of Baramba (681), Tigiria (375) and Dhenkanal (145) and in Cuttack (272) and Puri (96). Various castes were enumerated in the caste column of the schedules but the only caste of any numerical importance is the Tanti caste. In reality these Tantis are all Saraks or Saraki Tantis whose position is rather above that of the ordinary Tanti. They appear to have been originally derived from the offspring of a community of Buddhist monks who abandoned celibacy and formed domestic ties.* They are not served by Brahmans, though they worship the Vedic deities (Varuna, Indra, etc.), as well as Buddha. The festivals they observe are their own and not the Hindu festivals. The long isolation of this little community from its co-religionists has resulted in a certain assimilation of the Buddhists to their Hindu neighbours and apparently in a number of them being returned as Hindus at the census in Cuttack, but there can be no doubt that it is still correct to describe them as Buddhists and not as Hindus.

8. In the case of the Jains the difficulty is greater. In a recent pamphlet called "The Jains of India" by the President of the All-Indian Jaina Association the author repudiates the statement that Jains are "another sect of Hindu dissenters" as an "unmerited insult". A Jain he defines as one "who believes that the soul of man or any living being can by proper training, etc., become omniscient like the soul of the Jina, Conqueror of all passions; that the world consists of six eternal, uncreated, indestructible substances; and that the path to eternal freedom lies along the triple road of right belief, right knowledge and right action as disclosed in the Jaina sacred books in accordance with the tradition of Lord Mahavira. This is the essential minimum. If a man falls short of this, whoever he may be, he is not a Jain". The author scouts the idea that "the sect is now a well known subdivision of the Vaishya caste, which is divided into Agarwalas, Mahesris and Jains, the two former being orthodox Hindus while the last are classed as Hindu heretics". He points out that Jains are not all Vaishyas and that many

* Bengal Census Report, 1901, page 428.

Agarwalas are Jains. Although the Jains are not a Hindu caste, the fact that their religion forbids them to take life has led them into the peaceful paths of commerce, and there has been a certain obliteration of the boundary between them and the Vaishyas, the Hindu commercial caste. Although the Jains deny the authority of the Vedas and are therefore not Hindus, they do not generally regard themselves as forming a separate religious community and many of them, in spite of explicit instructions to the contrary, probably returned themselves as Hindus at the census. In parts of India they eat with Hindus and in parts they even intermarry, as admitted by the author of the pamphlet in the case of the Jain and Vaishnavist Agarwalas; "the line in fact which divides Jains from Hindus can with difficulty be traced; and there are other sects, admittedly Hindu, which present greater divergence from orthodox Brahmanism".* As it was 251 of the persons who were recorded as Jains by religion returned themselves as belonging to some Hindu caste, usually the Baniya caste. The number of Jains in the province is therefore probably greater than the 4,610 recorded in Table VI. The number recorded is almost exactly the same as in 1911, but the number in Hazaribagh district has greatly increased owing to a pilgrimage being in progress on Parasnath hill at census time.

9. Like the Buddhists, the Sikhs must be distinguished according as they are foreigners or natives of the province. The Sikh from the Punjab with his unshorn hair and distinctive clothes is readily distinguished in appearance from the local Hindu and his religion is no less different. A Sikh from up-country when questioned by the enumerator probably replied that he was a Sikh by religion adding perhaps that he belonged to some Hindu caste; there were 350 Sikhs in the province who were returned as belonging to one another of nine Hindu castes, the most popular being Lohars and Rajputs. Or he may have said that he was a Hindu by religion and a Sikh by caste. The former is the obvious answer, but in spite of special instructions to the contrary a few Sikhs appear to have been included as Hindus. This for instance must be the explanation of the fact that no Sikhs were returned at Jamalpur, where sixteen male Sikhs were employed in the workshops of the East Indian Railway. In this province there is a small community of non-immigrant Sikhs in Patna at the birth-place of Guru Gobind Singh, but they are numerous only at Sasaram where the Sikh community is said to date from the year 1666 A.D. when the town was visited by Tegh Bahadur, the ninth Guru and father of Guru Gobind Singh. At this point the dividing line between Sikhs and Hindus becomes obscure. The Sikhs of Sasaram are of two kinds, the Singhs and the Munrias or Munas. The former are the more orthodox and observe the outward signs of the Sikh religion in the shape of the five Ks prescribed by Guru Gobind Singh; they are largely Agraharis by caste. The Munas are followers of Nanak and less orthodox in their observances, being described like other followers of Nanak as Sahijdhari or "easy going"; they shave their hair and they worship indiscriminately in Sikh and Hindu temples. Shortly before the census of 1911 there had been a local revival in Sikhism: a lower primary school for Sikhs had been founded, families that had been backsliding from the Sikh religion had been reclaimed and new converts had been made; when census time came Singhs and Munas alike returned themselves as Sikhs. On the present occasion, the Munas returned themselves as Hindus and this accounts for the decrease in the number of Sikhs. There is little connexion between the Singhs of Sasaram and the Punjab, though a few of them journey to Amritsar at the time of important Sikh festivals. They maintain relations however with an offshoot colony of Agraharis in Calcutta and with another small colony in the Hunterganj thana of Hazaribagh district.

10. The Kumbhipatias, of whom a full description was given in the last census report, are another sect that originated in the Orissa States in the middle of last century in a revolt against Hinduism, the particular features of it to which objection was taken being idolatry and the caste system. The Kumbhipatias do not

* *Encyclopædia of Religion and Ethics*, Volume VI, page 695.

worship the Hindu gods, they do not reverence the Brahman, they take no account of the caste system and they do not bury their dead. Theoretically therefore they are clearly not Hindus, and the movement is still sufficiently recent to maintain its front against Hinduism. On the other hand the community is not a large one and force of necessity has decreed that a Kumbhipatia may marry a caste fellow who is not a Kumbhipatia. This rule leaves a side door open and gives scope for fraternization and easy relapse into Hinduism. The variation in the number of Kumbhipatias from census to census is evidence of the fact that the difference is not so clear as in theory it should be. The number of Kumbhipatias returned in 1911 was 755. Owing to an increase in Angul, the number has now risen to 1,231, though it is reported that the faith is not being propagated as enthusiastically as in the days of Bhima Bhoi and his disciples.

11. But these marginal obscurities are of minor importance as compared with the difficulty of distinguishing a Hindu from an Animist; not only are the numbers involved very much greater, but the hopes of demarcating a satisfactory boundary are

ANIMISTS.

very much less. The persons described as Animists in the census are those members of aboriginal tribes who belong to no definite religion and who when asked what their religion was simply replied that they followed the traditions of their tribe. Properly speaking therefore they should be defined in negative terms as being neither Hindus nor Muhammadans nor Christians nor adherents of any other definite religion. The difficulty of distinguishing the religion of such persons from the lower types of Hinduism has always been experienced at every census. Attempts were made on the present occasion to suggest certain questions to the enumerators the answers to which would enable a correct entry to be made in cases of doubt. For instance District Census Officers were asked to consider whether it might be possible to treat the employment or non-employment of Brahmans at marriage ceremonies as the criterion between Hindu and Animist; but the criterion was not as a matter of fact applied to any extent. Mr. Christian, the Subdivisional Officer of Chatra, who took great pains to try and get a correct return, worked out a whole set of questions, but they were necessarily so complicated that after making a few attempts he found it impossible to get the enumerators to understand them, and eventually he had to leave the decision entirely to the person enumerated. The Bhuiyas in the Chatra subdivision are decidedly Animistic in their belief and practices but "all Bhuiyas of course call themselves Hindus and every enumerator I questioned calls them Hindus as well; and, when I explained how they were not, they agreed in deference to me but were obviously not convinced. It will be seen therefore how hopeless it was. The result as regards the Bhuiyas will therefore in the main certainly not be in accordance with facts". It may be mentioned that the Bihari Hindu element is more powerful in the Chatra subdivision than elsewhere in Chota Nagpur and the tendency for the aboriginals to describe themselves as Hindus is therefore specially strong here. It is clear also that, however disinterested the intentions of the staff, if the persons enumerated do not understand the question put to them and if the staff themselves have no clear idea on the subject, the enumerator's personal equation will count for a great deal. In Hazaribagh it is reported that there was a tendency amongst Hindu enumerators to record aboriginals as Hindus in order to swell the Hindu numbers. From Ranchi a contrary tendency was reported for here "a Hindu enumerator of high caste, *e.g.*, a Rajput, would not admit a Jhora or a Gond or a Chero to be a Hindu and would not record him as such, though a Christian or a literate Oraon enumerator would not think of questioning such a claim". A similar tendency was manifest in Palamau. It seems however to be the general impression that, though the number of Animists has decreased in the census returns, there has been no corresponding movement amongst the tribes in the direction of Hinduism. A typical case from Hazaribagh, that of the Bhuiyas, has already been quoted in which a large number of persons were returned as Hindus who on a more searching scrutiny would probably be classed as Animists. In Ranchi in outlying parts persons who are certainly Animists join in Hindu festivals, but persons who are

equally certainly Hindus and even Muhammadans join in propitiating the local spirits through aboriginal priests, which is essentially Animism and there is no sign of these Animistic practices dying out. On the Manbhum border in the Panch Parganas, Mundas and Oraons have indeed for many years past reckoned themselves as Vaishnavist Hindus and become vegetarians and total abstainers. But this is not a movement of the last ten years; the only striking religious movement in the last ten years in Ranchi has been the Tana Bhagat movement and, however much this may have been affected by Hindu ideas, it was not, at all events in the minds of those who took part in it, a movement in the direction of Hinduism as will presently be shown. In Palamau "it is certain that all those who have returned themselves as Hindus have not embraced Hinduism, nor have they given up their important tribal beliefs and customs. Most of the aboriginals, or for a matter of that low caste Hindus, *e.g.*, Doms, Musahars, etc., have no ideas about religion and do not understand what it means"; but when they find that they have certain customs and beliefs in common with their Hindu landlords and *mahajans*, whom they look upon if not with affection at least with awe, they begin to think that they themselves also must be Hindus. At the same time "there is not any marked tendency on the part of the aborigines to embrace Hinduism". In Singhbhum it is said that a petition was received from a few Hos in the Kolhan asking to be returned as Hindus. It has also been observed that the Hos who live near Chaibasa now-a-days take part habitually in Harisankritan with *tulsi* beads round their necks. The marriage ceremony of the son of one of the leading Mankis was recently celebrated by a Brahman priest according to Hindu rites as well as according to the usual Ho ceremonial. But as regards the main body of the Hos "the tendency in the direction of Hinduism is still anything but marked".

12. From the Santal Parganas, where the number of Animists has increased, comes the same story. In the Bengali version of the specimen schedule issued for the guidance of enumerators certain Santals were shown as Hindus by religion. The District Census Officer thinks that but for this the number of Animists in the district might have been even greater. But the facts behind the figures seem to be much the same as in the districts of Chota Nagpur proper. "There have been," writes Mr. Bodding, "no regular conversions from Animism to Hinduism. The Santals have not reached such a stage yet". It is true that the Santals are adopting Hindu customs to an increasing extent: many of them for instance now buy themselves new clothes at the time of the Durga Puja and the worship of Kali in Santal villages has become general, while a great deal of the noise at Hindu festivals is supplied by the Santals. In Monghyr the Santals often erect the emblem of Mahadeo on the threshing floor and make offerings to it. The assimilation of Hindu customs has probably become more rapid now that the Santals as a whole have ceased to migrate, but Mr. Bodding does not think that "any Santal has got any thought of his being on his way to Hinduism". In fact the general impression is not of a marked general movement towards Hinduism amongst the aboriginal tribes proportionate to the decline in the number of Animists in the census returns, but rather of an increased conservatism on their part. An attempt will be made in the following paragraphs to support this view by an examination of certain religious movements that have been taking place in the last few years.

13. The most prominent of these movements* is one that has been taking place amongst a section of the Oraons of Chota Nagpur, which appears to have originated chiefly in resentment against the intruders on their ancient homes in the shape of their non-aboriginal landlords as is shown by a petition which they addressed to the Lieutenant-Governor in 1918 asking to be restored to their original status as owners of the soil, but partly also in the desire to raise their community to the level of their fellows who had become converted to Hinduism and Christianity. When they saw their own unhappy state and how the Oraons who had gone after other gods were

* I am indebted to Rai Bahadur Sarat Chandra Roy for permission to make free use of an article by him on the Tana Bhagat Movement which appeared in "Man in India", Vol. No. 4 of December 1921.

flourishing like a green bay tree, they naturally concluded that it was the spirits whom they had been worshipping who were to blame and that they should be worshipped no longer; this worship was not part of the ancestral tribal religion of the Oraons, and the time had now come to restore their ancient religion in its purity. The real religion of the Oraons they called the "Kurukh dharma" (*i.e.*, the religion of the Kurukhs, as the Oraons call themselves) or the "Bhakat" or "Bhakti dharma" (*i.e.*, the religion of love and devotion) and from the frequent use in their hymns and prayers of the word "tano" (*i.e.*, pull or expel, which was the effect they desired to produce on the spirits of whom they wished to be rid and amongst whom they included such works of darkness as motor cars and bicycles and other appliances of modern life) the followers of the new religion came to be called "Tanas" or "Tana Bhagats". The first person to give expression to the prevailing feeling of dissatisfaction was Jatra Oraon, a youth of about twenty years of age residing in the Bishunpur thana of the Gumla subdivision of Ranchi district. In April 1914 he proclaimed that Dharmes (the supreme Deity) had appeared to him in a dream and told him to give up believing in *bhuts* or spirits, to abjure animal sacrifices, animal food and liquor, to cease from ploughing the fields because it was cruel to the plough cattle and not to labour for men of other tribes or castes. Dharmes also told him to collect as many disciples as he could and to teach them the *mantras* or spells that had been revealed to him for the curing of physical infirmities. He soon gathered round him one or two thousand followers, but this manifestation of the spirit received a temporary check, for, when in conformity with his principles he refused to allow his followers to work as labourers in building a school in a neighbouring village, the police interfered and he and seven of his followers were bound down to keep the peace by the Subdivisional Officer of Gumla under section 107 of the Criminal Procedure Code. Another story says that the movement had its origin in Batkuri village in Ghaghra thana. While one of the villagers was engaged in ploughing, his wife went to a tank to bathe. When she remained absent for a long time, her husband grew anxious and went to see what had happened: he found his wife in a half-conscious condition and from her repeated cries of "Bom. Bom, Bom," it was clear to him that she had seen a vision. She was taken to the village and there she preached to them the new religion that had been revealed to her. The next and more enduring manifestation occurred in the latter part of the year 1915. This time the movement spread from the south-west of the district through the centre up to the northern thanas where it seems to have taken root, and it also affected a section of the Oraons in the adjoining districts of Palamau and Hazaribagh: the area in which the movement seems to be finding a permanent home lies in the Bero, Burmu and Mandar thanas. A widespread campaign was now undertaken for the expulsion of the unprofitable spirits. Oraon youths collected at nights on open spaces outside the villages and were instructed in the teaching and *mantras* of the Tana Bhagats. When they had been instructed they in turn held similar meetings to impart the instruction they had received to others and so the movement spread snowball-wise. When it was decided that the *bhuts* were to be expelled from any village the young men would gather on the boundary and start reciting sing-song incantations (usually in Hindi and not in Oraon) until one of their number showed signs of possession and indicated the place where one of the evil spirits was to be found. The company would then arrange themselves round the spot leaving an opening towards the north and begin chanting *mantras* with the often repeated refrain "Tano, Baba, tano" (*i.e.*, pull, father, pull), calling upon the good spirits to expel the bad spirits, clapping their hands meanwhile and marking time with their feet. This process would continue until one of the company again showed signs of possession and started to run about, whereupon all present would start running too and shouting "Hato, hato; bhago, bhut, bhago" (*i.e.*, away, away; fly away, spirit) until they felt that the desired effect had been produced. They would then proceed to other places where the presence of *bhuts* was indicated and repeat the operation. The purging of each village took several nights; the work would begin at the outskirts and advance gradually inwards towards the central group of houses. When the first houses were reached a white goat was set at large in the name of the sun god with the prayer that the village

might be forgiven for any sins which it had committed in the past through ignorance of the true religion. The purging of the *basti* itself took several nights and days, for each hut was thoroughly searched until finally some stick or straw in which a *bhut* was supposed to reside was brought out and burnt. As each hut was cleared offerings of fruits and sweets were made inside it.

14. It will be readily understood that these nightly gatherings, accompanied as they were by much excitement and at which no one but an Oraon was allowed to be present, caused considerable alarm and anxiety. Landlords and money-lenders began to be alarmed for the safety of their persons and property and liquor sellers were disturbed by the loss of income involved by the growing popularity of vows of total abstinence. In November 1915 a woman who was suspected of being a witch was clubbed to death and her brains were eaten by a frenzied mob of Tana Bhagats. It was also alleged that the Tana Bhagats were invoking the German God to help them in their campaign against the spirits, and the allegation is supported by the fact that the Tanas constructed a chariot of a peculiar shape for ceremonial purposes which was supposed to represent a German warship. It is not however proved that the invocation was deliberately seditious; the Tanas probably thought that the God who was then reported to be assisting the Germans to win such glorious victories in Europe would be a useful ally to them in Ranchi also. The sub-inspector of police of Sisai who was allowed to attend a day meeting reported that over twenty resolutions were put to the assembled Oraons and carried, but they were all of an unexceptionable character and showed that the Tanas had no sinister designs against their unconverted neighbours or the Government. The authorities however decided in view of the growing excitement that nocturnal meetings and also large gatherings by day unless they were strictly orderly must cease and some followers of the movement who failed to furnish security to keep the peace were sent to jail. At this many of the less enthusiastic Tana Bhagats fell away and the movement shifted from its first stage, which consisted in the expulsion of the unprofitable spirits, to the second in which it became a propaganda for the reform of the morals, the religion and the social practices of the Oraons. At the same time the suspicion and alarm with which the movement had been viewed by outsiders began to disappear and its history since then has been a relatively uneventful one. The influenza epidemic also was regarded by many Oraons as a sign that they had been wrong to discard the spirits which they had exorcised and caused a severe set-back to the movement.

15. The underlying tendency of the Tana Bhagat movement in its more attractive aspect as a reform movement is towards an increased simplicity and purity of life. The candidate for admission has to undergo purification by taking a draught of water in which gold, copper and *tulsi* leaves have been dipped, and he then undergoes a period of probation usually for three or six months, though the period may be extended up to three years, during which his faithfulness to the precepts of the *dharma* is tested. When he is passed as suitable for admission he is allowed to give a feast to his friends and relatives who belong to the *dharma* and is thereby admitted to membership. The Tana Bhagat is required to give up intoxicating drinks and animal food, music, dancing and hunting—a renunciation of much that is dear to the Oraon heart: in pursuance of the same idea no musical instrument made of animal hide may be used and red *sag* leaves, which are the colour of blood, may not be eaten. The Tana Bhagat may only eat food cooked by a co-religionist and he must not marry a non-believer. Jewellery, fine clothes and tattoo marks are forbidden. Stress is still laid upon the necessity for ceremonial purity though the Oraon observances in this matter are simplified. The Oraon practices with regard to marriage, child-birth and death have been changed. For instance the rough and ready method of marriage by intrusion is not recognized, and the ceremonials connected with naming and piercing the ears of infants have been abandoned: dead bodies are sprinkled with sanctified water and buried; they are no longer burned because to smell the fumes is the same thing as tasting human flesh. The use of water in which molasses have been melted has been generally substituted for the ceremonial use of rice beer. The Tana Bhagat is enjoined to greet his co-religionists

as "Baba" (father) and to give them every assistance. He is required to attend the *mandali* or congregation on Thursday, which is their sabbath day, to join in the hymns and offerings and to submit any differences or disputes that may arise to the assembled people for settlement, disobedience to the decision generally being punishable with excommunication. Over and above these outward observances he is to keep himself from evil, particularly in the form of lying and stealing, and his whole life should be informed—as the name of the sect denotes—by a spirit of love and devotion. These are the tenets of the main body of the Tana Bhagats or Ram Bhagats as they call themselves. But since the movement started a fissiparous tendency has appeared. An extreme section known as Sibu's party or the Sad Tanas at one time gave up ploughing on the ground that it was cruel to the cattle—a welcome corollary to this being that no rent need be paid. When this extreme line of action proved impracticable, those who had advocated it were the first to lose their enthusiasm and to start drinking intoxicating drinks and eating the flesh of animals once more. In the autumn of 1920 some 2,000 persons of this party from Ranchi and Palamanu districts went across to Satpahari hill in the Tandwa police-station of Hazaribagh district at the command of Sibu Bhagat leaving their houses, crops, and cattle uncared for. They said they did this because the *zamindars* were claiming their lands and told them that they might go and practise their *dharma* in the jungle. Meanwhile their leader promised them that after enduring tribulation for a season they should eat off gold plates. After some weeks in the wilderness however when there was no sign of the gold plates and even food began to fall short the people dispersed and returned to their homes. Sibu himself accompanied by some 200 followers returned to Burmu, where, in order to impress upon them that they might eat anything and take their food from the hands of any one, he wounded himself in the thigh with a knife and with the blood that flowed from the wound he smeared some beef which he made them eat. From that day they have ceased to have any scruples with regard to their food. The Bachhidan Bhagats are nearer to Hinduism than the Ram Bhagats; they make offerings to Hindu gods and have not eschewed the use of jewellery or fine clothes. They present a cow to the society on admittance. In their aversion from fine raiment they resemble the Jhandi Bhagats, another sect, so called because they set up *jhandis* or flags when they are admitted to the fold.

16. It is interesting to note one or two of the main conditions which determined the growth of this movement. It seems to have grown like many, if not all, of the other similar movements amongst the people of Chota Nagpur from a general feeling of dissatisfaction with their economic condition. They also saw their fellow Oraons who had become Hindus or Christians better provided with their world's goods, better educated and better able to protect themselves against their landlords and money-lenders. To minds of an occasionalistic turn, accustomed to trace the direct intervention of gods and spirits in every event of life, this could only mean that the spirits whom they had been worshipping were not worth the pains that had been bestowed upon them. The feeling of dissatisfaction therefore took the form of a religious revival: but in the Oraon universe there is room for any number of gods, so the revival took the form in the first place not of a searching of hearts or call to repentance amongst the worshippers but of a change in the objects worshipped, a substitution of new gods for old or rather an elimination of certain unsatisfactory newcomers. The good spirits—the sun and the moon, the starry host, the German Baba and others—were invoked by the Tanas to drive away the spirits which had failed them. At the same time attention to the state of mind of the worshippers was not lacking and this aspect became more prominent as the movement developed. It has been noted above that the *mantras* and hymns of the Tana Bhagats are chanted not in Oraon but Hindi, and it is probable that the idea of *bhakti* or loving faith as the principle of right living was derived from Vaishnavism, though the same idea must have been familiar from the teaching of the Christians. The Tana Bhagat movement may be regarded as a genuine effort to spiritualize the Oraon religion and make it more adequate to the needs of a tribe that had inevitably become more sophisticated by the lapse of time and contact with

other more advanced communities. Such reforming movements are at once necessary to and a symptom of the vitality of the tribal religion. It is perhaps also legitimate to regard this movement as symptomatic of the general separatist tendency of the last few years. The Oraon heaven is to be kept for the Oraon gods and intruders are to be expelled. The half religious, half political up-rising under Birsa Munda at the end of last century, of which a description was given in the last census report, was in some ways parallel to the Tana Bhagat movement, but there are also marked points of difference. Although violence was by no means unknown amongst the Tanas, who even made a half-hearted attack upon Basia police-station in 1922, the Tana Bhagat movement originated chiefly in the feeling of dissatisfaction amongst the Oraons at there being something rotten in the state of their own pantheon: the Birsa movement originated in a violent feeling of resentment particularly amongst the Mundas at the intrusions of foreigners (*dikkus*) and, the enemy being more tangible, the movement was correspondingly more violent. Again, the part played by Birsa in the Birsait movement was more prominent than that played by Jatra Oraon in the Tana Bhagat movement: Birsa purported not only to deliver a message from heaven but to be himself an incarnation of the deity and he descended to various tricks to substantiate his claims to divinity. The earlier movement therefore depended a great deal more on the inspiration of a single man than did the later, and when Birsa died the movement could only be maintained on the hypothesis that he had been translated. In the case of the Tana Bhagat movement no such extravagant claims seem to have been made by Jatra or any other leader: the movement seems throughout to have been the expression of a popular need and to have been marked on the whole by a surprising absence of charlatanry on the part of its leaders. One successful piece of imposture may however be mentioned. In the village of Sahdhe near Lohardaga a man and his wife set up a stone in their house which they said marked the birth place of Bhagwan. This they covered with red, black, white and yellow cloths in turn to the admiration of all beholders and pilgrims soon began to flock to the spot from all over the district with offerings of rice, *ghi*, milk and sweet-meats which were pocketed by the showman to the value of Rs. 2,000 or Rs. 3,000. He also induced the pilgrims to dig a tank and a well for him. Unfortunately he eventually ruined his reputation by prophesying a hail-storm which did not materialize. Incidents of this description do not however disguise the genuine basis of the movement.

17. It will be noticed that at this census the Birsait religion has vanished from Table VI and no single person has recorded himself as such. It must not be inferred from this that the Birsa cult is yet dead. Possibly the delay in his expected second coming has caused some to waver, but it is reported that in the Khunti, Torpa and Tamar thanas of Ranchi district there are some six or seven hundred Mundas who worship the one God under the name of Birsa Bhagwan and observe various customs which are not those of their fellow Mundas. Outwardly they are to be known by the three flags which they keep planted outside their houses and by the sacred thread which they wear. They still do not sacrifice goats or fowls like other Mundas, they do not eat fish or flesh nor do they touch drugs or any intoxicating drink. Generally they are drawn from the more extreme and excitable part of the Munda community and recently they have included the name of Mr. Gandhi in their *mantras*, but it seems doubtful whether Birsa taught his disciples anything of permanent importance that is likely to keep them alive as a separate religious community.

18. The Tana Bhagat movement proper is confined to the Oraons, but the Mundas who live in the adjacent parts of the Khunti subdivision have also been affected. Some of them now style themselves Bhagats and profess the same principles as the Tana Bhagats; they have ceased to believe in spirits, they abstain completely from intoxicating drinks, meat and fish, and practise *ahimsa*. They wear the sacred thread and do not intermarry with other Mundas. A rather similar movement called the Satya or Punya Dharma was started amongst the Hos also about fifteen years ago by Singrai Ho. He taught that the true god (Sat Malik) cannot be represented by images.

BIRSAITS.

OTHER MOVEMENTS AMONGST ANTIMISTS.

but that he is to be worshipped in spirit by prayer and meditation: prayer has power also to cure disease. The use of intoxicating drinks and meat and even *ghi* is forbidden, and dancing is taboo. Much stress is laid on ceremonial and personal cleanliness, and a touch of colour is given by the use of red and yellow umbrellas.

19. A further sign that restlessness and dissatisfaction with their religion exists among the aboriginals of Ranchi district may be found in the spread of Kabirpanthism in the Khunti sub-division. It appears to have been originally introduced in Bundu and Sonahatu thanas from Chattisgarh in the Central Provinces and about ten years ago a *guru* named Kristo Mohan made a number of converts amongst the Khangar Mundas on the borders of the Ranchi and Khunti subdivisions, where about seventeen families profess the new doctrine. Conversion does not appear to affect their outward way of life to any serious extent, for the converts continue to eat and intermarry with other Khangar Mundas and observe the same marriage and funeral ceremonies. But they believe in one God, they have ceased to believe in witchcraft or to worship their ancestors, and they have given up dancing. They tell their beads when opportunity offers and sing the hymns of Kabir after their evening meals. Once a year, when their *guru* visits them, they hold a feast and offer sweetmeats, spices, nuts and a piece of white cloth to the deity. The son of a Kabirpanthi is not born a Kabirpanthi but has to be initiated. Apart from the fact that they usually wear yellow clothes and, unlike other Mundas, salute one another with an embrace there is little to distinguish the Kabirpanthis outwardly from their fellows. It is however reported that their conversion has made a marked change in their outlook and manner of life.

20. It might have been expected that the distress of the years 1918-19 would have led to a marked recrudescence of the Kharwar movement in the Santal Parganas. "In times of comparative plenty or prosperity very little is heard of it; during times of famine or scarcity the movement revives".* This however does not seem to have been the case: there have been no startling developments in the last few years of the decade, and the movement appears to be losing ground. It is however by no means dead and lives on in the Pakaur, Dumka and Godda subdivisions where distrust of the efficacy of spirits (*bonaas*), very similar to the feeling that was at the bottom of the Tana Bhagat movement and a lurking desire to return to the worship of the one God, whom according to tradition the Santals worshipped in olden times, still gives it life. Formerly all Kharwars observed the same practices though their *gurus* might be different; now, there being no central authority to guide, kindle or restrain, the *gurus* are striking out lines of their own and the Kharwars, though they all worship Ram Chandra, are tending to fall into separate groups with different practices, some of them at variance with those they originally observed. The original sect, an account of which will be found in the district gazetteer, are now commonly spoken of as the Babajius.* Parallel with this sect have developed two other sects called the Sapai and the Samra: of these the name Sapai is connected with the name Sapha Hor (or purifiers) by which the Kharwars originally described themselves, while the name Samra is the name of a village in the Godda subdivision in which the *guru* of this sect resides.†

(i) *The Sapai sect.*—At the name giving and marriage ceremonies of a Sapai, only Sapai are present, nor will a Sapai eat in the house of a Santal who is not a member of this sect. They do not drink rice beer; they do not keep or eat fowls or pigs, nor will they eat the flesh of a bullock. Some of them refuse to use cows for ploughing. Sometimes they burn, sometimes they bury their dead. They bathe daily, usually in the early morning. The men worship alone and the first meal of the day of which they partake must have been prepared by men's hands. Every day the women plaster with dung a small circular spot in the middle of the court-yard and

* Santal Parganas Gazetteer, page 150.

† The following information is obtained from a note kindly supplied by the Rev. P. O. Boddington of Dumka.

at the end of the village street which symbolizes the sun; and some of the women worship every evening after sunset turning to the four quarters of the world with a small lamp in their hands. There is a general gathering at the *guru's* house every Saturday.

(ii) *The Samra sect.*—A candidate for admission to the Samra sect has to renounce his belief in spirits (*bongas*), and worship and behave himself as he is told. If his faith stands the test for a year, he makes offerings according to his ability of sugar, sweets or money in the name of Ram Chandra which he hands over to the local leader. At the next meeting the leader prays that the candidate may be delivered from all sickness and disease and sprinkles *tulsi* water on his head: the offerings are then divided among the congregation and the newcomer is admitted as a member. The meetings of this sect take place every week, at night, on Friday, Saturday or Sunday. All the congregation bring sugar and sweets which they hand over to the leader and place on a small circular spot plastered with cowdung. They report any troubles that they may have to the leader who lays them before Ram Chandra and prays that each sufferer may have a happy issue out of his affliction. They then remain singing hymns till dawn when they divide the offerings amongst themselves and depart. The Samras have specialized in exorcism and the benefits of their skill are not confined to the members of their own sect. Any one who is ill and can obtain no help from the Ojhas can apply for and obtain the assistance of the Samra *gurus* by making suitable offerings and doing as he is bidden. The Samra *guru* accompanied by seven or eight of his disciples then goes to the house of the afflicted person on an appointed day where he mutters invocations of the spirits and helps himself to the sweets offered. In the evening a he-goat or a ram is produced which the *guru* beheads and he and his disciples then cook the flesh and eat it together with as much rice as they want: after this the night is spent in singing hymns. The next day a circular space in the court-yard is plastered with cowdung and round this they all sit, drawing figures on the ground with a piece of sugarcane and then spitting and trampling upon them, that being the effect they desire to produce on the evil spirits. After this has gone on for some time a fowl is sacrificed and a pig is buried alive and the *guru* and his disciples take their departure warning the inmates of the house not to worship the *bongas* any more but to call upon the one true God, Ram Chandra, in good days and evil.

21. The continued existence of this movement suggests that some of the Santals are out-growing their tribal religion and yet they are not willing to abandon it for one of the other religions with which they are acquainted. Cases in which Santal men have become Muhammadans are unknown, though Santal women have married Muhammadans and embraced their religion: there is said to be a remarkable dislike for the "Turuk" amongst the Santals dating from recollections of the Muhammadan cavalry. Again, it is not possible for individual Santals to turn Hindu; a large number of them might perhaps establish themselves as a new caste by inventing *ad hoc* some suitable story of their origin, but this idea does not seem to have entered their heads. Nor do they generally desire to embrace Christianity. The result is an attempt to raise the tone of their own religion by introducing into it much that they have learnt from the Hindus and the Christians. In the name of Ram Chandra the term Ram is borrowed from the Hindus; the insistence on daily bathing and the abandonment of meat-eating are inspired from the same source. Much of their hymns on the other hand is borrowed from the Christians for phrases occur reminiscent of the Christian Bible. It seems therefore legitimate to compare the Kharwar movement in this respect with the Tana Bhagat movement amongst the Oraons and to find in each a determination amongst the tribes of the Chota Nagpur Plateau to reform and adhere to their own tribal religions rather than to turn elsewhere.

22. The last half of the last decade has been a time of great stir amongst the Muhammadans in this province as in India generally, and a few words may be said on the subject before the statistics are discussed. The entry of Turkey into the European war could not fail to produce a profound impression and since then the fortunes of that country have caused them much anxious thought.

MUHAMMADANS.

This is primarily a matter of political interest and the excitement was at first confined to the newspaper-reading classes, but inasmuch as the fate of the Jazirat-ul-Arab, which contains the holy places of Islam and in which the prophet had said on his death-bed that no non-Muslim should ever rule, was involved in the peace settlement a great deal of feeling was aroused with a strong religious tinge which eventually spread even to the villages. The feeling was not of course confined to Bihar and Orissa; it drew Muhammadans together all over India without respect to provincial boundaries. It first found expression in 1919 when a series of questions were put to the Muhammadan ulemas of India as to the action which Indian Muhammadans should take in the event of the Sharif of Mecca being declared Khalif. On the political side the agitation resulted in the formation of the Khilafat committees in every district of the province except Puri, the primary object of which was to maintain the power of the Sultan-Khalif, but as these committees became more and more political in character and even Hindus were appointed to membership of them, there sprang up the Jamayat-ul-Ulema, an organization with a definitely religious character intended for the "defence and safety of Islam" because "the dignity and prestige of the faith and the enforcement of religious laws are impossible without communal strength". This organization, the headquarters of which are in Bombay, has branches all over India: in Bihar and Orissa, as in other provinces, an Amir-i-Shariat with a deputy and nine councillors were appointed just after the census to whom allegiance has been given by many, and it is proposed to appoint an Amir as well as a Darul Kaza or district court in every district. The reasons for the appointment of the Amir-i-Shariat are thus stated: "All the Muslims should know the Islamic law that when an Islamic country comes into the possession of non-Muslims, it is incumbent on the former to appoint a religious head so that religious laws might be observed and followed under his guidance and orders: that Kazis be appointed to decide cases amongst them according to religious laws: that cases between Musalmans should not be placed before non-Muslims or non-Muslim officers because the decision of a non-Muslim would not be binding and conclusive according to Muhammadan law. In particular, religious differences should not be referred to non-Muslims for decision because it would be a slur on Islam. The arrangements of prayers on Fridays and the two Ids. of the common public chest—all such institutions are essential to a Musalman's mode of life and without appointing an Amir-i-Shariat these injunctions could not be observed". Since the institution of the provincial Jamayat various problems have been referred to it for solution, for instance how far Muhammadans are justified in partaking in Hindu religious processions and ceremonies, how far it is right for a Muhammadan to abandon the sacrifice of cows in difference to Hindu objections, and the decisions of the Jamayat have been orthodox and unyielding. They have also given advice on matters of a more secular nature such as the use of *charkhas* and the boycott of foreign cloth, and quite recently the Central Khilafat Committee has decided to accept the Jamayat-ul-Ulema as their "dictator" as regards the policy to be adopted with regard both to the Jazirat-ul-Arab and to other questions outside India such as the fate of Thrace, Adrianople, the Straits and Smyrna, the retention of which by the Turks indirectly affects the position of the Khalif. At the moment therefore the political activities of the Jamayat-ul-Ulema figure larger in the public eye than their religious activities. In India it is always difficult to disentangle the political from the religious, but this particular organization is undoubtedly primarily religious and is the most tangible expression of the religious ferment amongst the Muhammadans during the last few years. The Shias, like the Sunnis, have been perplexed in the extreme by the course of the war and the peace terms and have in some cases lent their support to the Khilafat agitation although they do not recognize the Khalif; but they have held aloof from the Jamayat-ul-Ulema.

23. It was decided at a rather late stage of the proceedings that Sunni and Shia Muhammadans should be separately recorded at the present census.

SUNNIS AND SHIAS.

As the vast majority of the Muhammadan population are Sunnis and the number of Shias is relatively small, instructions were given that the word "Shia" should be

recorded in the census schedules in the case of all Shias, but no entry of sect should be made in the case of Sunnis, the presumption being that all Muhammadans were Sunnis unless they explicitly stated that they were not. As the result 3,711 Shias were enumerated in the province distributed as shown in the following statement :—

	PERSONS.	Males.	Females.		PERSONS	Males.	Females.
NORTH BIHAR ...	2,457	1,117	1,340	ORISSA ...	10	7	3
Saran ...	1,457	650	807	Cuttack ...	8	6	2
Muzaffarpur ...	193	75	118	Puri ...	2	1	1
Darbhanga ...	230	92	138	CHOTA NAGPUR			
Bhagalpur ...	470	243	227	PLATEAU. ...	389	192	197
Purnea ...	107	57	560	Palaman ...	283	132	151
SOUTH BIHAR ...	855	407	448	Manbhum ...	13	7	6
Patna ...	96	56	40	Orissa States ...	93	53	40
Gaya ...	135	50	75				
Shahabad ...	259	108	151				
Monghyr ...	365	183	182				

It is certain that these figures are not nearly complete and the reason is that many Shias refused to record themselves as such. On the very day before the census a speech was made in the Legislative Council at Patna by a Shia member in which he said that "it has got into the heart of most of the Shias of the province that the new departure in the present census by treating Sunnis and Shias separately and not jointly as Musalmans according to the old practice has caused them a great reluctance and annoyance. I should acknowledge that a majority of the Shias are abstaining from this and mentioning themselves as mere Musalmans." An estimate places the number of Shias in the province at about 17,000 : those in Patna at about 10,000 instead of 1,000, and those in Saran at about 4,000 instead of 1,500. The principal Shia centres of the province are in Patna, Gaya, Saran, Muzaffarpur and Palaman, while small colonies are also found in Shahabad, Monghyr, Bhagalpur and Purnea. The Shias are found for the most part among the middle and lower middle classes of the Muhammadan population.

24. The disputed succession of the Prophet and the division of the Muhammadan world into Shias and Sunnis has from the earliest days been the cause of bitter feeling, the Sunnis recognizing Abu Bekr, Omar and Osman as the first three successors of the Prophet while the Shias regard them as usurpers. Fifty or sixty years ago marriages between Sunnis and Shias were of common occurrence in Bihar but a feeling grew up against them and they practically ceased : in recent times a few such cases have been occurring but they are exceptional. Nevertheless the members of the two sects dine freely together and attend each other's marriage and funeral parties. Prominent Shias have associated themselves with the Khilafat movement, which is essentially a concern of the Sunnis, and Sunnis no longer object to the calling aloud of that sentence in the Shia *azan* or call to prayer which proclaims that Ali succeeded to the headship of Islam immediately on the death of the Prophet. For many years it was difficult and even dangerous for Shias to visit the Arabian sanctuaries, and they took to visiting the shrines of the Alid martyrs at Kerbela instead; if they visited Mecca they used, for safety's sake, to adopt the Sunni form of prayer. An interesting account received from a Shia gentleman of this province of his experiences during a recent visit to Mecca and Medina shows that during his pilgrimage he experienced no such difficulty; he joined in congregations consisting of as many as 5,000 Shias in the Kaaba itself and no objection was raised by the Arabs. At Medina he found that the Governor, who was a Sunni, had a Shia assistant so that all assistance possible might be given to Shia pilgrims. On the voyage there was no reference to the eternal dispute between Sunni and Shia, though both sects were represented on board the ship : conversation was engrossed by a dispute between the Sunnis regarding the extent and nature of the human knowledge of the Prophet. When this rapprochement is occurring between Sunni and Shia in the holy places, it is natural that greater

cordiality in their relations should be found in Bihar also. The very fact that the census statistics for Shias are so inaccurate is a proof that this is so.

25. The Ahmadiyyas, a sect which was founded in the Punjab by Mirza Ghulam Ahmad in the latter half of the 19th century and which was described at some length in the last report, maintain their position in their province. Mirza Ghulam Ahmad is said to have prophesied the war and downfall of the Tsar of Russia as early as 1905. When war broke out the community lost no time in declaring their loyalty to the British Government, an act which coincided with a renewal of the persecutions to which they had been subjected in the past. The doctrines were first preached in this province by the late Maulavi Hasan Ali of Bhagalpur who gained a considerable number of converts amongst the educated section of the local Muhammadan community. It is claimed that the Ahmadiyyas now number 2,500, of whom 500 are to be found in Bhagalpur and Monghyr and 2,000 in Cuttack and Puri. It is in Orissa that the sect has developed most in the last ten years and it has also been in Orissa that the opposition of the orthodox Muhammadans has been most marked.

26. The absolute statistics with regard to Christians will be found in Imperial Table XV where they are distinguished by race and by sect.*

CHRISTIANS :

NUMBER AND DISTRIBUTION.

Subsidiary Table III at the end of this chapter shows their number and variation without these distinctions. Of the 303,358 Christians in the province, 6,312 are of European or allied races, 4,125 are Anglo-Indians or persons of mixed descent and 292,921 are Indian Christians. The Europeans and Anglo-Indians are found chiefly in Patna where are the headquarters of Government and the only cantonment in the province, and in Singhbhum, Manbhum and Monghyr where they are attracted to industrial centres. 284,043 of the total number of Christians were enumerated in the Chota Nagpur Plateau and 197,216 of them in Ranchi district. No other district can compare with this figure, but 46,084 Christians were enumerated in the Orissa Feudatory States and over 10,000 in Singhbhum and the Santal Parganas. In the province as a whole there has been an increase of 13·1 per cent. on the number of Christians recorded in 1911. The proportional increase is higher in South Bihar (36·3 per cent.) where a "mass movement" has recently been conducted by the Methodists amongst the lower castes in Shahabad, and the missionaries claim that the increase should have been still higher and that but for pressure brought to bear on the enumerators at the time of the census to record the new converts as Hindus the number of Methodists in the district would have been much greater than 1,265. In the Chota Nagpur Plateau the proportional increase is smaller, only 13·1 per cent., but the actual increase amounts to over 30,000, 20,000 of which occurred in Ranchi district. Singhbhum also shows an increase of over 3,000 owing to the growth of Jamshedpur and still more to extensive

* After this chapter was written a communication was received from the Bihar and Orissa Representative Council of Missions throwing doubt upon the accuracy of the census figures for Christians and representing that the actual number of Protestant Christians in this province was some 60,000 more than the census figure, the difference being marked in Shahabad, Chota Nagpur and the Santal Parganas. As regards Shahabad, enquiry showed that there had been some refusal on the part of the enumerators to record recent low caste converts as Christians, partly owing to pressure from the local landlords, partly owing to the influence of an Arya Samaj missionary and partly to the enumerators' own disinclination, but the figure 6,000 claimed by the Methodist missionaries was thought to be excessive. As regards Chota Nagpur it was found that the figures supplied to the Council were not accurate. The number of Lutherans reported by the Secretary of the G. E. L. Mission for the five districts of Chota Nagpur was 82,000 or 37,000 less than the figure given by the Council, but 8,000 more than the census figure and practically identical with the census figure of 1911. The unanimous opinion of a number of officers who have been serving in Ranchi district during the last few years is that the number of Lutherans has decreased. When the Lutheran missionaries were first interned the congregation was left without its natural leaders and it would have been surprising if a decrease had not occurred, particularly as the converts would always find a welcome in the other churches. As regards the Santal Parganas it was found that some 2,500 Anglicans from Jalpaiguri had by mistake been included in the figures supplied to the Council, while as regards the Lutherans the figure included a certain number of persons who live across the boundary of Bengal but belong to the congregations in the Santal Parganas. After making deductions on this account the differences between the two sets of figures are reduced to more reasonable dimensions but there is still on the present as on previous occasions a difference between the census and the mission figures. In the Chota Nagpur districts emigration probably accounts for several thousands of absentees. The names of even permanent emigrants who retain land in their native villages are often retained on the books of the missions. In the case of the Lutherans in the Santal Parganas at any rate the mission figures were the result not of counting but of a computation made a year and a half after the census and there is a natural tendency in such cases to over-estimate; for instance cases of back-sliding are not willingly admitted. There appears to be no case for supposing that the census figures are inaccurate on the scale alleged by the Council.

conversions in the neighbourhood of Manoharpur. In the Orissa Feudatory States no Christians were recorded in 1891: by 1901 there were 2,962 Christians and now there are 46,084, the increase in the last decade amounting to 19·9 per cent. In North Bihar owing to conversions in Purnea there has been an increase of 7·0 per cent. but there has been a loss in four districts: the numbers involved are small and are presumably connected with the decline of the planting community. Orissa, owing to a loss of Christians in Balasore, shows a decline of 3·3 per cent. The growth of the Christian community is due primarily to conversions and not to natural increase. When the census was taken an effort was made to ascertain the tribe or caste to which the converts belonged, and the most important of the figures are reproduced at the end of Imperial Table XIII. The tribe which is shown to have supplied the greatest number of converts is the Oraons (119,431) followed by the Mundas (93,814) and Kharias (34,101) and then at an interval by the Santals (8,367).

27. Nearly half the Christians in the province are Roman Catholics and of that half nearly three-quarters are found in Ranchi district where

ROMAN CATHOLICS.

a mission was established nearly fifty years ago in 1874. In this district, in spite of the fact that 7 per cent. of the Roman Catholic population are reported to have died of influenza, there are now over 100,000 Indian Roman Catholics who are found in all thanas of the district but especially in Chainpur, Kurdeg and Simdega. There are now 21 Roman Catholic mission stations in the district and 21 churches, with a staff of 69 European and 13 Indian male missionaries and 25 European and 8 Indian Ursuline sisters. The mission maintains 354 schools of different kinds, mostly village schools, which contain 9,000 pupils. Not least of the mission's activities is a co-operative society with a working capital of Rs. 2½ lakhs and a membership of 13,000. After Ranchi the Roman Catholics are most numerous in the adjacent state of Gangpur where the work is carried on under the same auspices and where the converts number some 25,000. Here, as in Palamau where there are over 7,000 Roman Catholics, there has been a slight decrease in numbers in the last decade. In Champaran the Roman Catholics number 2,481 or practically the same as ten years ago. Bettiah in this district is the headquarters of an historical Capuchin mission founded in 1745 and there is a considerable Christian community in that subdivision which has been Christian from generations. A number of them are the descendants of the original converts who came from Nepal when the priests were expelled from that country and first made their home in Bettiah, and their foreign origin is still noticeable in the faces of many of them. Patna, where there are 1,283 Roman Catholics, has recently been made the headquarters of a Roman Catholic bishopric; a large boys' school at Kurji and a convent school for girls at Bankipore swell the number of Roman Catholics in this district. In Purnea the number has increased from under 200 to nearly 1,000. Roman Catholics are to be found in every district in the province, but elsewhere their numbers are not great.

28. The number of Lutherans has fallen by about 3,000 owing to the events of the last few years. Their most important centre is in Ranchi where

LUTHERANS.

a mission was founded in the year 1845 by Germans. In 1869 it split into two parts, one of which remained independent while the other amalgamated with the Anglican Society for the Propagation of the Gospel. The former increased rapidly in numbers down to and after the date of the last census, but the outbreak of the war in Europe followed by the internment of the German missionaries in July 1915 left it in difficulties. At that time the mission had 13 stations in Ranchi district, 3 in Singhbhum, 2 in Gangpur and one each in Hazaribagh, Manbhum and Sambalpur. From these centres 34 German missionaries, 23 of whom were married, carried on work, supervising 240 village primary schools, 36 boarding schools and 13 kinder-gartens containing in all nearly 9,000 pupils. The congregation at the time numbered 89,000 baptized persons and 10,600 catechumens and in looking after them the German missionaries were assisted by an Indian staff of over 400 pastors and teachers. When the orders for their internment were received the German missionaries themselves committed this vast charge to the direction and care of the Anglican Bishop in Chota Nagpur, who agreed to undertake

it. The authorities of the Society for the Propagation of the Gospel in England undertook to provide for an emergency staff of eight additional Europeans and many of the society's staff of missionaries in Chota Nagpur undertook to supervise the work of the Lutheran mission over large areas in addition to their own duties. The Bishop undertook to receive no Lutherans into the Anglican Church during the period of the war and organized a committee of Indian Lutheran pastors to direct the affairs of the congregation. In this manner the work of the Lutheran mission was preserved intact till about a year after the end of the war. When the time came for this supervision to be withdrawn a commission was sent round to the chief Lutheran stations to ascertain what the wishes of the people were for the future. They elected as a body for an autonomous church, and the number of individual Lutherans who joined the Anglican Church was very small. The United Missions' Board of Lutheran Churches in America undertook to supply the financial support formerly obtained from Berlin, and at present there are two American missionaries in Ranchi. The affairs of the congregation as such are entirely in the hands of the Indian Lutheran church which has drawn up and adopted a written constitution affirming its own autonomy. In other parts of the province, for instance in the so-called "Ganges Mission" where the Lutherans were less numerous and where it was not possible to take such elaborate precautions for preserving their tradition, the Lutherans have in many cases seceded to other Christian churches; in Shahabad the entire Lutheran community has joined the Methodist Episcopal church. In the Santal Parganas the Lutherans are the converts of the Scandinavian Lutheran mission, which was not affected to the same extent by the war. In the Feudatory States the great majority of the Lutherans are found in Gangpur.

29. The number of Anglicans, who represent 11·5 per cent. of the Christian population of the province, is 35,119. Members of this church are to be found in every district, but more than half of them (20,100) are to be found in Ranchi where a mission station of the Society for the Propagation of the Gospel was first opened about 50 years ago. There are 36 Europeans on the staff of this mission of whom 8 work in Singhbhum district. The society maintains three hospitals in the district and there is a fourth hospital and a school at Itki in charge of 6 European sisters of the community of St. Denis. The number of Anglican schools in the district is about 90 and the pupils about 3,000. After Ranchi the Anglicans are most numerous in Singhbhum (4,383) where the number has nearly doubled since 1911. The new converts come largely from near Manoharpur where an oppressed tenantry found a champion in one of the Christian missionaries and embraced his religion. They are also numerous in the Santal Parganas (3,789) where the Church Missionary Society is at work in three of the subdivisions and in Patna (1,363) where, apart from the English officials and their families, there was at the time of the census a battalion of English troops at Dinapore.

30. The Baptists are most numerous in the Orissa Division, where they represent nearly seven-eighths of the Christian community, and in the state of Patna. The headquarters of the Baptist mission which has now been in existence for a hundred years are at Cuttack, where one of the best private presses in the province is maintained, but the greatest accession of converts has taken place in Sambalpur district, where the number has risen from 1,993 in 1911 to 2,828, and in Patna State. The converts have come largely from the Ganda caste, and the rapid increase in numbers is ascribed largely to the impression produced by the social and educational advancement of the Christian converts on their unconverted neighbours. It is probable that a good many of the Christians who did not return their sect in Purnea are Baptists.

31. A few words may be added with regard to some of the smaller and less known Christian missions found in the province.

(1) The Regions Beyond Missionary Union has six stations in the Tirhut division, three in Saran and three in Champaran, in addition to seven out-stations. This interdenominational society was founded in England in 1873

and its work in India began at Motihari in 1899. There are now 15 European missionaries and 30 Indian workers. The mission maintains 2 orphanages, one middle English school and 20 primary schools, and in co-operation with the Bettiah Raj is about to open a hospital in the Tharu country in the north of the Bettiah subdivision. The Christian community connected with the mission numbers about 400, and is drawn mostly from the lower castes.

(2) The Open Brethren, who represent the more numerous section of the Plymouth Brethren after the breach of 1849, have three stations in the Banka subdivision of Bhagalpur district, where three missionaries are in charge of two dispensaries, two schools and an orphanage (now closed); the earliest of these stations was opened in 1892. In the Santal Parganas they have four stations at Jamtara, Mihijam, Karmatanr and Surajpura.

(3) The Assemblies of God Mission has five stations in Bihar, at Bettiah, Chapra, Laheria Sarai, Madhupur and Giridih which are served by two missionaries. At Bettiah there is a girls' orphanage. The Assemblies of God were founded by a body of men in St. Louis, Montana, U. S. A., in 1913 and opened their first mission station in this province at Bettiah in 1918.

(4) The Hephzibah Faith Mission of the Holiness Church of Christ, the headquarters of which are in Tabor, Iowa, U. S. A., began work in India in 1900 near Raniganj: its Indian headquarters have since 1910 been at Adra in Manbhum district where there is a boys' school, while there is a girls' school at Raghunathpur. There are four missionaries in India attached to this mission.

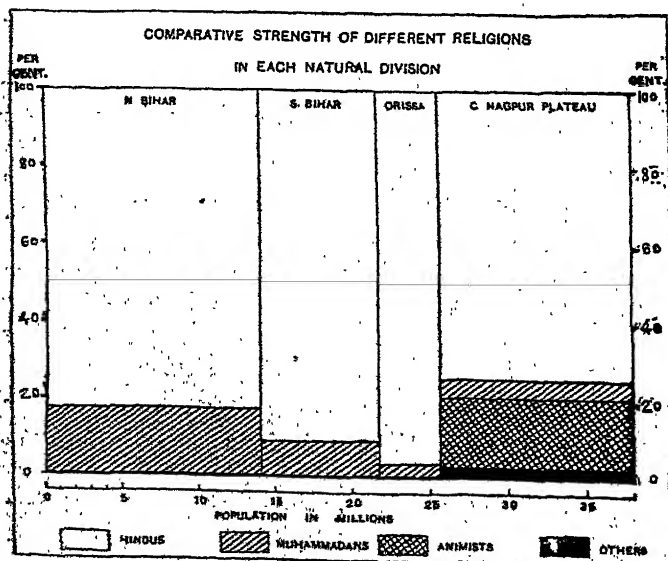
(5) The Churches of Christ in Great Britain and Ireland have a mission at Daltonganj and a branch at Latehar in Palamau district. The mission conducts a middle English and a lower primary school, and land has been bought for a girls' school and hostel. The converts have come mostly from the Bhuiya and Oraon castes. Evangelization in the villages is done by Indian preachers.

(6) The Brethren in Christ were founded in Pennsylvania, U. S. A., in the latter part of the eighteenth century by Jacob Engle. This church has a mission in the north of Bhagalpur district where four schools, two of them orphanages, and a small dispensary are maintained. Apart from the missionaries there are five teachers who preach in the villages.

(7) The Seventh Day Adventists, a denomination which originated nearly eighty years ago in the United States of America, have had a mission station at Tentulbandha in the Jamtara subdivision of the Santal Parganas for the last 25 years. There is one family of missionaries who maintain a school for boys and another for girls. The converts are Santals.

STATISTICAL.

32. Of the total population of the province, 31,599,625 or 83.2 per cent.

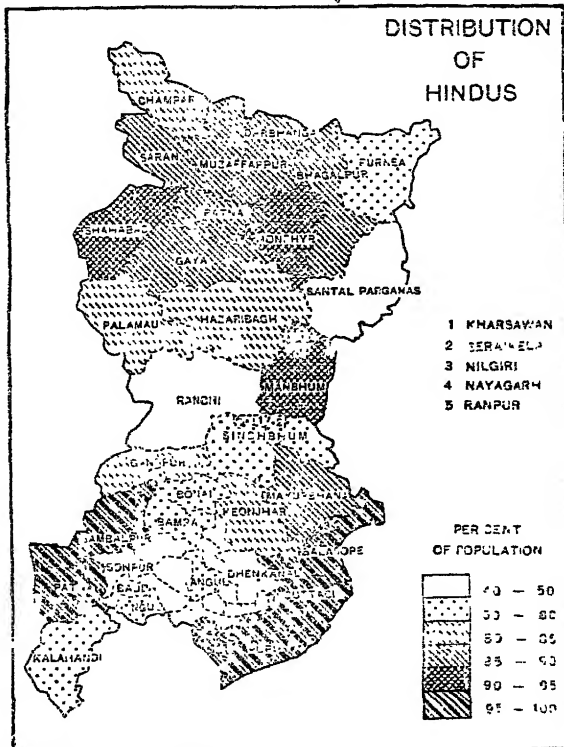


are Hindus, 3,706,277 or 9.8 per cent. are Muhammadans, 2,237,943 or 6.2 per cent. are Animists, and 303,358 or 0.8 per cent. are Christians, the balance being accounted for by various minor religions. The distribution of the religions in each Natural Division is illustrated in the marginal diagram which brings out clearly the great numerical preponderance of the Hindus throughout the province.

33. The Hindus are in a majority in every district in the province except in Ranchi where they number 42 per cent. and in the Santal Parganas where they number 46 per cent. of the population.

NUMBER AND DISTRIBUTION OF HINDUS. The proportionate distribution to the population as a whole is shown in Subsidiary Table II and illustrated in the following map. The proportion of Hindus to the total population is highest in Orissa where it reaches 96·8 per cent. and exceeds 95 per cent. in each of the three districts included in it. After Orissa the Hindus are proportionately most numerous in South Bihar (90·5 per cent.) which is usually regarded as the

centre of Muhammadanism in this province; in North Bihar, where they number 11½ millions, they represent only 83·1 per cent. of the population owing to the high percentage of Muhammadans in Purnea, and in the Chota Nagpur Plateau, where there are over 2 million Animists, only 74·6 per cent. In Orissa the population of Hindus has been steadily declining since 1891 in the Natural Division as a whole and (with the exception of a slight increase in Puri in 1901 caused by an influx of Hindu pilgrims) in each district separately, owing to a correspondingly steady if slight increase in the proportion of Muhammadans. In South Bihar on the other hand there has been for the last twenty years a tendency for the



proportion to increase: this is marked in Patna and Gaya; in Shahabad and Monghyr the proportion of Hindus is higher but stationary. In North Bihar the proportion is decreasing, the tendency being traceable in every district of the Tirhut division except Saran: the proportion of Hindus here is highest in Bhagalpur (89·1 per cent.) and lowest in Purnea (58·6 per cent.). Except in the Chota Nagpur Plateau the variations in the Hindu population are the result of natural growth or the fluctuations of migration; conversions to Hinduism are negligible. In the Chota Nagpur Plateau the Hindus are losing ground to the Animists in Palamau and the Santal Parganas, but elsewhere they are gaining at the Animists' expense by the slow and intangible process of conversion. The general nature of this defection from Animism to Hinduism and how far it represents a change in the outlook and practices of the people concerned has already been discussed: the statistics will be considered in greater detail in connexion with Animism.

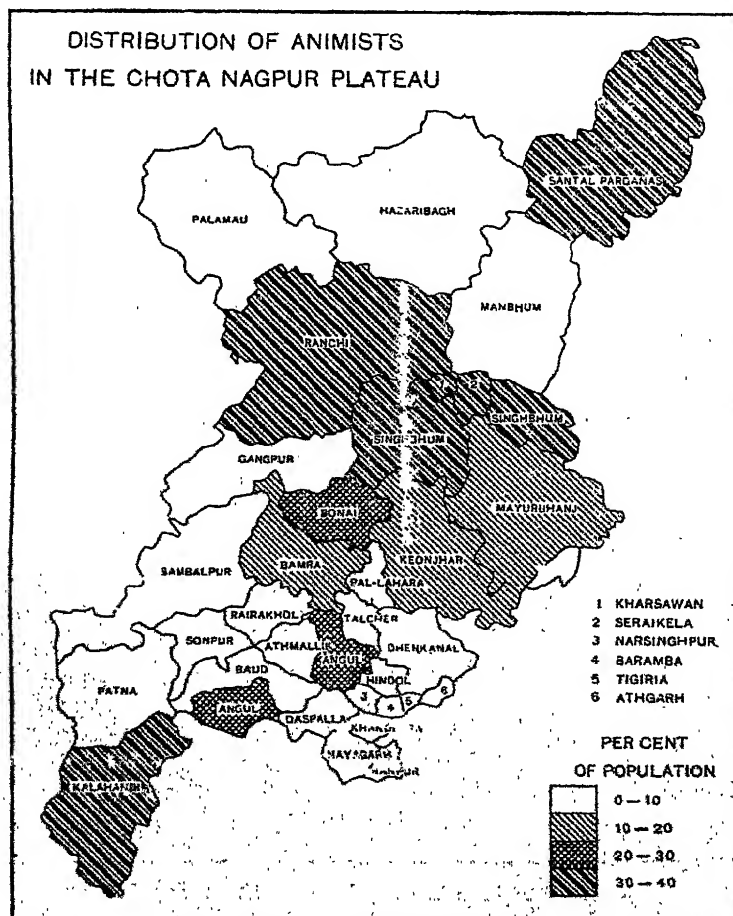
34. The number of Muhammadans in the province is 3,706,277. Their actual and proportionate distribution is shown in Subsidiary Tables I and II, and the latter is further illustrated by the following map, which shows clearly how the Muhammadans shade away from the north to the south. In only one district of the province, Purnea, does the Muhammadan population exceed half a million and even there the Hindus are in a majority. The Muhammadans of Purnea number 814,402 and represent 40·2 per cent. of the district population. 378,000 of them are found in the Kishanganj subdivision where:

religions. In the other three divisions they have lost, but owing to the relatively heavier losses of the Muhammadans in South Bihar, they now form a larger proportion of the population there than they did ten years ago. Except in South Bihar the Muhammadans have increased both absolutely and relatively, though the increase is not great. It is greatest in North Bihar and the Chota Nagpur Plateau. In the former the increase has been proceeding steadily except in Saran and Purnea, and in the Chota Nagpur Plateau there has been the same steady tendency except in Angul, Sambalpur and the Orissa States. In the first place it must be remembered that the Muhammadans always gain over the Hindus to a slight extent by conversion. Muhammadanism is a proselytising religion and a devout Muhammadan will glory in making conversions. There is always a certain number of Hindus of the lower castes or Hindus who for one reason or another find themselves outcasted who are glad to find a refuge in Muhammadanism which teaches that all men are equal in the eyes of God. There is always therefore a small transfer from Hindu to Muhammadan of isolated cases of this kind but the number is not sufficient to affect the proportion between the two religions. No cases of wholesale conversion in the last decade have been reported, and the Muhammadan increase must therefore have some other explanation. This tendency for Muhammadans to multiply more rapidly than Hindus has often been remarked. The difference cannot be accounted for by a difference of marriage rate for, except in the Chota Nagpur Plateau, the proportion of married women at the reproductive ages per hundred of the female sex is identical for the two religions. Nor can it be accounted for by the fact that the one religion deliberately limits the size of its families while the other does not. Nevertheless the statistics show a marked difference in the proportion of children per cent. of the married women at the reproductive ages. The difference for the province is 8 per cent. in favour of the Muhammadan women: in South Bihar the difference is only 3 per cent.; in Orissa it is 15 per cent. Some part of this must apparently be ascribed to the fact that the proportion of married Muhammadan women living in the later years of the reproductive period is greater than the proportion of Hindu women, which suggests that child birth is apt to be less dangerous in the former case: if so, the Muhammadan mother would live to become the mother of a larger family. It has sometimes been suggested that Muhammadans are naturally more fecund than Hindus. It seems however to be doubtful if the natural fecundity of the population can be at all closely correlated with the actual increases that have occurred in the case of the Muhammadans or of the Hindus or of any other religion, for the extent of the natural fecundity of the human race is not always realized. It has been calculated that between the years 1906 and 1911 the population of the world was increasing so rapidly that it would double itself in about sixty years. At this rate of increase the estimated population of the world in 1914 would be produced by the progeny of a single pair in 1782 years. Again, suppose a population of one million, half male and half female, forming 500,000 married couples. If each couple produced two children, one male and one female, in 20 years and then died off and if all the children and the children's children married and repeated the process every twenty years, then at the end of 100 years the population would still be a million. But if the average size of the family was increased to $2\frac{1}{2}$, the population at the end of 100 years would be 3,050,000; if to 3, the population would be 7,954,000; if to 4, it would be 32,000,000; and if to 5, it would be 97,650,000.* Of course, all parents do not die at the age of 20 nor do all persons born live to that age, but these figures give some idea of the powers of reproduction of the human race and it is difficult to suppose that, so far as physical capacity is concerned, the actual number of births that has occurred bears any close relation to the number that might have occurred. Unfortunately no separate birth-rates for Hindus and Muhammadans are available; but separate death-rates are published and show that in the last ten years the Muhammadan death-rate has invariably been lower than the Hindu death-rate. This fact corroborates to some extent the general statement sometimes made that as a whole Muhammadans are more comfortably provided with this world's goods than are the Hindus. When it is remembered that by far the greatest number of deaths occur in the early years of life, it appears to be a legitimate inference that in the case of

* Carr Saunders: *The Population Problem*, page 105.

Muhammadans more infants survive to maturity, and that this is the cause of their more rapid increase.

36. Of the 2,337,943 Animists in the province 2,294,617 or 98·1 per cent. are found in the Chota Nagpur Plateau; elsewhere they are numerically unimportant. In all four divisions there has been a decrease in the absolute and proportionate numbers. In North Bihar the decline is marked in Bhagalpur where the number has fallen from 22,215 in 1911 to 5,072 on the present occasion: twenty years ago the number of Animists recorded in the district was 3,060 only. The Animists occur chiefly in the Colgong thana of the Sadr subdivision and in the Kateria and Banka thanas of the Banka subdivision on the borders of the Santal Parganas. The variations in numbers do not mean migration, for the proportion of Animists born in the Santal Parganas, which is their spiritual if not their actual home, was the same ten years ago as it is to-day, about one-tenth. Nor do they mark the ebb and flow of an intense religious struggle: the Santals who live in Bhagalpur district are in closer contact with the Hindus than they are in the Santal Parganas and the process of assimilation is more gradual and steady than the figures imply. In Purnea, where they are found chiefly in the Sadr subdivision and especially in Dhamdaha thana, the number of Animists has declined from 29,971 to 22,409 or from 151 to 111 per 10,000 of the population. Twenty years ago there were all told only 295 Animists in the district, but since then there has been a great immigration of Santals and other Animist tribes: nearly half of the Animists enumerated in the district were born in the Santal Parganas. In South Bihar the few persons in the south of Shahabad who returned themselves as Animists in 1911 have now returned themselves as Hindus, but in Monghyr, where they are found in Kharagpur thana in the south, the number of Animists has increased from 7,510 to 8,044. In Orissa the Animists are negligible in Cuttack and Puri; in Balasore, where they are found in the north-east corner of the Sadr subdivision, their number has declined from 8,768 to 7,611. In these three Natural Divisions the Animists are only found in any numbers in thanas adjoining the Chota Nagpur Plateau, to which for all intents and purposes Animism is confined. The following map, which is based on the figures in Subsidiary Table II, illustrates the distribution of Animists in the Chota Nagpur Plateau.



37. The following table shows the variation in the number of Animists in each district and state in the Chota Nagpur Plateau since 1911 :—

DISTRICT OR STATE.	ANIMISTS.		Increase (+) or Decrease (-) in decade.	
	1921	1911.	Actual.	Per cent.
CHOTA NAGPUR PLATEAU.	2,294,617	2,650,160	- 355,543	- 13.42
Hazaribagh	65,869	86,706	- 20,837	- 24.03
Ranchi	525,721	607,820	- 82,099	- 15.50
Palaman	43,319	34,883	+ 8,436	+ 24.18
Manbhum	29,805	209,956	- 180,151	- 85.80
Singhbhum	332,090	386,992	- 54,902	- 14.2
Santal Parganas	783,631	731,328	+ 52,303	+ 7.15
Angul	48,963	57,788	- 8,825	- 15.27
Sambalpur	8,285	34,925	- 26,640	- 76.27
Orissa States	403,239	437,702	- 34,463	- 7.87
Athgarh	86	...	+ 86	...
Atchamalilik	643	5,598	- 2,950	- 81.99
Bamra	26,931	40,797	- 13,866	- 33.98
Baramba ... ..	...	...	...	...
Baud	8	77	- 69	- 89.61
Bonai	15,743	22,181	- 6,438	- 29.02
Daspalla ... ..	...	...	...	...
Dhenkanal	4,497	9,647	- 5,150	- 53.38
Gangpur	22,053	62,886	- 40,833	- 64.93
Hindol	21	1,068	- 1,047	- 98.03
Kalahandi	156,151	162,963	- 6,812	- 4.18
Keonjhar	64,951	59,570	+ 5,381	+ 9.03
Khandpara ... ..	...	...	...	...
Mayurbhanj	100,164	54,351	+ 45,813	+ 84.3
Narsinghpur ... ..	...	...	...	...
Navagarh	6,190	10,746	- 4,556	- 42.4
Nilgiri	4,169	4,471	- 302	- 6.75
Pal Lahara ... ..	...	...	...	...
Patna	301	894	- 593	- 66.33
Rairakhol	1,326	2,972	- 1,646	- 55.4
Ranpur ... ..	...	...	...	...
Sonpur ... ..	...	1,122	- 1,122	...
Talcher ... ..	...	359	- 359	...
Tigiria ... ..	...	...	...	...
Chota Nagpur States	53,695	62,060	- 8,365	- 13.47
Saraikela	39,170	43,784	- 4,614	- 10.53
Kharsawan	14,525	18,276	- 3,751	- 20.52

In the British districts there has been an increase of Animists in the Santal Parganas where more of the Sauria Paharias and Mal Paharias and in Palamau where more of the Oraons have been recorded as Animists than in 1911. The decreases are most marked in Manbhum, Ranchi and Singhbhum. In Manbhum and Singhbhum the Santals have gone over wholesale to the Hindus: in Ranchi the Oraons have been classified as Animists and Hindus in about the same proportions as in 1911, but in the case of the Mundas the Hindu proportion is distinctly increasing, as it is also in the case of the Kamars and Mahlis. The Hos in Singhbhum are not quite so uncompromisingly Animistic as in 1911, but the land-slide has not yet begun. In Sambalpur the Mundas, Kharias and Kisans have been more freely reckoned as Hindus than before. Throughout the Orissa and Chota Nagpur Feudatory States the Hindu proportions have increased except in the important states of Mayurbhanj and Keonjhar. The variations in some of the states are extreme and as they represent no very striking movement either to or from Hinduism it is unnecessary to discuss them in detail. Generally the tendency is for the tribes to be returned as belonging to their tribal religion so long as they live in their proper homes, as for instance the Santals in the Santal Parganas, the Hos in Singhbhum, the Oraons and Mundas in Ranchi or the Kandhs in the Khondmals, but when they move away into other districts they tend to find themselves Hindus.

SUBSIDIARY TABLE I.—GENERAL DISTRIBUTION OF THE POPULATION BY RELIGION.

RELIGION AND LOCALITY.	Actual number in 1921.	PROPORTION PER 10,000 OF POPULATION IN—				VARIATION PER CENT: INCREASE (+) OR DECREASE (—).			PERCENTAGE OF NET VARIATION, C.C.P.
		1921.	1911.	1901.	1891.	1911-1921.	1901-1911.	1891-1901.	
1	2	3	4	5	6	7	8	9	10
HINDUS.									
BIHAR AND ORISSA ...	31,550,628	8,324	8,260	8,359	8,276	— 0·6	+ 3·0	+ 1·4	+ 2·4
North Bihar ...	11,036,673	8,307	8,314	8,372	8,364	— 0·8	+ 1·2	+ 0·2	+ ·69
South Bihar ...	6,855,357	9,051	9,041	9,024	9,020	— 2·4	+ 0·9	— 3·7	— 5·1
Orissa ...	3,660,359	9,681	9,693	9,719	9,746	— 4·7	+ 0·6	+ 0·8	+ 3·4
Chota Nagpur Plateau ...	9,235,230	7,430	7,224	7,350	6,340	+ 3·3	+ 12·1	+ 5·8	+ 20·4
MUHAMMADANS.									
BIHAR AND ORISSA ...	3,706,877	976	958	968	1,072	+ 0·6	+ 4·0	+ 1·5	+ 6·2
North Bihar ...	2,335,307	1,067	1,043	1,021	1,614	+ 0·8	+ 3·3	+ 0·5	+ 4·7
South Bihar ...	637,159	920	932	965	950	— 3·7	+ 3·8	— 3·1	+ 9·2
Orissa ...	113,903	256	273	243	289	+ 2	+ 10·4	+ 11·0	+ 32·9
Chota Nagpur Plateau ...	550,646	453	428	415	599	+ 5·7	+ 17·5	+ 14·6	+ 42·5
CHRISTIANS.									
BIHAR AND ORISSA ...	303,353	80	70	47	34	+ 13·1	+ 55·5	+ 50·0	+ 133·2
North Bihar ...	6,927	5	5	4	3	+ 7·0	+ 20·5	+ 32·0	+ 71·9
South Bihar ...	7,414	10	7	6	6	+ 30·3	+ 17·7	+ 0·3	+ 60·9
Orissa ...	4,974	13	13	13	12	— 3·3	+ 2·8	+ 7·9	+ 7·24
Chota Nagpur Plateau ...	284,043	230	203	145	143	+ 13·1	+ 50·5	+ 60·9	+ 145·5
ANIMISTS.									
BIHAR AND ORISSA ...	2,337,943	616	708	625	617	— 14·1	+ 19·2	— 6·9	— 3·0
North Bihar ...	27,494	20	37	2	18	— 47·3	+ 1,446·2	— 86·4	+ 11·1
South Bihar ...	8,044	11	12	4	5	— 13·3	+ 240·6	— 27·3	+ 117·1
Orissa ...	7,798	20	31	20	—	— 11·1	+ 4·5	—	—
Chota Nagpur Plateau ...	2,304,617	1,553	2,141	2,089	2,947	— 13·4	+ 16·9	— 6·3	— 3·3
OTHERS.									
BIHAR AND ORISSA ...	14,655	4	4	1	1	+ 2·6	+ 270·4	— 14·2	+ 64·9
North Bihar ...	1,255	1	1	1	1	— 45·9	+ 158·9	— 45·8	— 46·0
South Bihar ...	6,029	8	8	1	1	— 8·3	+ 543·7	+ 1·0	+ 39·8
Orissa ...	740	2	2	1	3	— 0·3	+ 263·7	— 32·14	— 52·14
Chota Nagpur Plateau ...	6,631	5	4	2	1	+ 42·8	+ 166·0	+ 160·6	+ 572·3

SUBSIDIARY TABLE II.—DISTRIBUTION BY DISTRICTS OF THE MAIN RELIGIONS.

DISTRICT AND NATURAL DIVISION.	NUMBER PER 10,000 OF THE POPULATION WHO ARE—															
	Hindus.				Muhammadans.				Animists.				Others.			
	1921.	1911.	1901.	1891.	1921.	1911.	1901.	1891.	1921.	1911.	1901.	1891.	1921.	1911.	1901.	1891.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
BIHAR AND ORISSA.																
BIHAR AND ORISSA ...	8,324	8,260	8,359	8,276	976	958	968	1,072	616	708	625	617	84	74	43	35
NORTH BIHAR																
North Bihar ...	8,307	8,314	8,372	8,364	1,067	1,043	1,021	1,614	20	37	2	18	6	6	5	4
Saran ...	8,817	8,868	8,818	8,818	1,181	1,182	1,181	1,181	...	...	...	...	2	2	1	1
Champaran ...	8,425	8,468	8,511	8,551	1,590	1,493	1,475	1,438	...	...	...	...	15	15	14	11
Muzaffarpur ...	8,741	8,764	8,771	8,771	1,258	1,253	1,229	1,237	...	...	...	...	3	3	3	3
Darbhanga ...	8,683	8,738	8,786	8,787	1,310	1,268	1,211	1,209	...	...	...	...	2	4	3	4
Bhagalpur ...	8,914	8,880	8,977	8,911	1,053	1,068	1,008	902	25	104	15	122	8	8	6	5
Purnea ...	6,858	6,893	6,701	6,856	4,022	4,178	4,233	4,141	111	161	2	...	9	8	4	3
SOUTH BIHAR																
South Bihar ...	9,051	9,041	9,024	9,029	920	932	965	969	11	12	4	5	18	15	7	7
Patna ...	8,943	8,901	8,935	8,948	1,008	1,069	1,147	1,134	...	...	...	...	52	40	18	19
Gaya ...	8,978	8,968	8,935	8,938	1,018	1,028	1,064	1,060	...	...	...	...	4	3	1	2
Shahabad ...	9,267	9,276	9,271	9,276	718	703	725	720	...	9	...	...	15	12	4	4
Monghyr ...	9,021	9,014	9,029	9,033	931	939	951	942	40	25	13	18	8	12	7	7
ORISSA																
Orissa ...	9,681	9,693	9,719	9,746	285	272	243	239	20	21	20	...	14	14	13	15
Cuttack ...	9,673	9,685	9,708	9,712	312	301	278	273	...	...	...	...	15	13	14	15
Balason ...	9,806	9,836	9,845	9,744	304	293	264	244	78	83	79	...	12	15	12	13
Fuzi ...	9,775	9,796	9,812	9,815	308	289	270	166	1	...	...	...	16	15	11	20
CHOTA NAGPUR PLATEAU																
Chota Nagpur Plateau ...	7,430	7,224	7,350	6,340	453	428	415	599	1,553	2,141	2,089	2,947	235	207	147	144
Razabach ...	8,335	8,273	8,100	8,247	1,065	1,035	1,018	985	516	673	667	754	34	19	17	13
Ranchi ...	4,138	3,967	3,955	3,941	392	389	353	320	3,930	4,331	4,600	5,098	1,491	1,293	1,052	671
Palamu ...	8,432	8,440	8,305	8,319	880	839	845	845	591	608	621	724	101	113	129	112
Manbhum ...	9,154	8,977	8,703	8,150	685	535	428	446	182	1,366	792	1,391	39	33	23	13
Singbhum ...	6,267	4,197	4,321	4,235	206	111	88	59	4,372	6,573	6,578	6,817	154	118	113	89
Santhal Parganas ...	4,578	5,122	5,613	5,134	1,063	938	840	601	4,357	3,884	3,493	4,141	62	50	64	24
Angul ...	7,232	7,073	7,763	7,967	17	17	19	13	2,632	2,897	2,383	20	59	8	2	1
Rambalpur ...	9,311	9,439	9,523	...	44	43	60	...	105	400	609	...	40	44	12	...
Orissa States ...	8,777	8,701	8,744	...	38	39	38	...	1,089	1,153	1,208	...	136	107	12	...
Chota Nagpur States ...	6,333	6,718	6,920	6,743	113	108	93	95	3,521	4,175	3,986	5,192	9	1	1	...

SUBSIDIARY TABLE III.—CHRISTIANS: NUMBER AND VARIATION.

DISTRICT AND NATURAL DIVISION.	ACTUAL NUMBER OF CHRISTIANS IN—				VARIATION PER CENT.			
	1921.	1911.	1901.	1891.	1911-1921.	1901-1911.	1891-1901.	1881-1891.
1	2	3	4	5	6	7	8	9
BIHAR AND ORISSA ...	303,358	268,265	172,498	108,914	- 13.1	+ 55.5	+ 58.4	- 133.2
NORTH BIHAR ...	6,927	6,473	5,374	4,082	+ 7.0	+ 20.5	+ 32.6	+ 71.0
Saran ...	378	437	314	278	- 14.6	+ 39.2	+ 12.0	+ 34.2
Champaran ...	2,782	2,775	2,417	2,100	+ 3	+ 14.8	+ 15.1	+ 32.5
Muzaffarpur ...	510	593	710	371	- 8.3	+ 24.2	+ 93.5	+ 120.4
Darbhanga ...	521	705	710	550	- 32.0	+ 7.9	+ 50.8	+ 37.1
Bhagalpur ...	1,082	1,102	775	536	- 1.8	+ 32.2	+ 44.0	+ 101.9
Purnea ...	1,350	500	439	357	+ 170.0	+ 13.9	+ 13.4	+ 543.3
SOUTH BIHAR ...	7,414	5,440	4,623	4,608	+ 36.3	+ 17.7	+ 0.3	+ 60.9
Patna ...	3,175	2,585	2,562	2,533	+ 22.8	+ 0.9	- 9.6	+ 13.1
Gaya ...	428	349	253	174	+ 22.6	+ 37.9	+ 45.4	+ 140.0
Shahabad ...	2,162	700	375	277	+ 208.0	+ 86.7	+ 35.4	+ 680.6
Monghyr ...	1,649	1,506	1,433	1,324	- 8.7	+ 26.0	+ 8.2	+ 24.5
ORISSA ...	4,974	5,145	5,004	4,638	- 3.3	+ 2.8	+ 7.9	+ 7.2
Cuttack ...	2,406	2,406	2,632	2,723	+ 3.7	- 9.3	- 2.6	- 8.2
Balasore ...	1,192	1,458	1,274	1,075	- 15.2	+ 14.4	+ 15.5	+ 10.9
Puri ...	1,286	1,291	1,078	549	+ 4	+ 18.5	+ 23.2	+ 53.1
CHOTA NAGPUR PLATEAU	284,043	251,207	157,497	95,616	+ 13.1	+ 59.5	+ 64.7	+ 145.5
Hazaribagh ...	2,123	1,758	1,163	859	+ 15.9	+ 53.0	+ 30.8	+ 138.8
Banchi ...	197,216	177,473	124,958	75,693	+ 11.1	+ 42.0	+ 65.1	+ 160.5
Palamau ...	7,253	7,783	7,908	6,676	- 6.4	- 1.6	+ 18.5	+ 3.1
Manbhum ...	5,647	4,560	2,910	1,532	+ 25.6	+ 54.6	+ 59.9	+ 293.6
Singbhum ...	11,309	8,200	6,661	4,584	+ 37.9	+ 17.8	+ 43.1	+ 132.5
Santal Parganas ...	11,001	10,168	9,875	5,943	+ 8.2	+ 2.9	+ 66.2	+ 85.1
Angul ...	123	60	33	10	+ 75.3	+ 169.1	+ 73.7	+ 547.4
Sambalpur ...	3,112	2,793	714	...	+ 11.4	+ 201.2	...	...
Orissa States ...	46,084	38,422	2,962	...	+ 19.9	+ 1,197.2	...	...
Chota Nagpur States ...	145	18	13	...	+ 705.0	+ 38.5	...	...

SUBSIDIARY TABLE IV.—RELIGIONS OF URBAN AND RURAL POPULATION.

NATURAL DIVISION.	NUMBER PER 10,000 OF URBAN POPULATION WHO ARE—					NUMBER PER 10,000 OF RURAL POPULATION WHO ARE—				
	Hindu.	Muhamma- dan.	Ahmist.	Christian.	Others.	Hindu.	Muhamma- dan.	Ahmist.	Christian.	Others.
1	2	3	4	5	6	7	8	9	10	11
BIHAR AND ORISSA	7,620	2,106	67	169	38	8,351	933	637	76	3
North Bihar ...	7,331	2,568	9	83	10	8,334	1,642	20	3	1
South Bihar ...	7,653	2,309	1	80	67	9,169	813	11	4	3
Orissa ...	8,325	1,479	2	170	15	9,734	239	30	6	1
Chota Nagpur Plateau ...	7,766	1,644	270	359	31	7,453	422	1,807	225	4

CHAPTER V.

AGE.

The absolute figures regarding the age of the population will be found in Imperial Table VII, where age is combined with sex, civil condition and religion. In Part A of that table separate figures are given by sex for the unmarried, married and widowed of each religion in the province: figures are given for each single completed year of life up to but excluding 5 and thereafter in quinquennial age groups up to but excluding 70, all persons of 70 and over being shown in a single group. The limits of the age groups are denoted by two figures of which the second represents the upper limit which is not included in the group; thus the age group 0-1 includes all persons who have not completed a full year of life, and the age group 5-10 includes all persons who have completed 5, 6, 7, 8 or 9 but not those who have completed 10 years of life. Part B of the table gives similar statistics for each main religion in each district, but the age periods are not given in the same detail; the first five years of life are given in two periods 0-1, and 1-5, from 20 to 60 the ages are given by decennial instead of quinquennial groups, and all persons of 60 and over are shown in a single group. Part C gives similar statistics for the four cities. At the end of this chapter will be found the following Subsidiary Tables which contain proportional figures designed to bring into relief important aspects of the statistics :—

Subsidiary Table I.—Age distribution of 100,000 of each sex by annual periods.

Subsidiary Table II.—Age distribution of 10,000 of each sex in the province and each Natural Division.

Subsidiary Table III.—Age distribution of 10,000 of each sex in each main religion.

Subsidiary Table IV.—Age distribution of 1,000 of each sex in certain castes.

Subsidiary Table IV-A.—Proportion of children under 12 and of persons over 40 to those aged 15-40 in certain castes: also of married females aged 15-40 per 100 females.

Subsidiary Table V.—Proportion of children under 10 and of persons over 60 to those aged 15-40; also of married females aged 15-40 per 100 females.

Subsidiary Table V-A.—Proportion of children under 10 and of persons over 60 to those aged 15-40 in certain religions; also of married females aged 15-40 per 100 females.

Subsidiary Table VI.—Variation in population at certain age periods.

Subsidiary Table VII.—Reported birth-rate by sex and Natural Divisions.

Subsidiary Table VIII.—Reported death-rate by sex and Natural Divisions.

Subsidiary Table IX.—Reported death-rate by sex and age in decade and in selected years per mille living at the same age according to the census of 1911.

Subsidiary Table X.—Reported deaths from certain diseases per mille of each sex.

2. A knowledge of the age constitution of the population is important in many ways. The energy and vigour of the community can be measured to

IMPORTANCE OF AGE STATISTICS.

some extent by the proportion of persons at the more efficient ages; other things being equal, a community with a high proportion of persons in the middle age groups will be more effective than one in which the high proportions occur in the earlier and later age groups and, the middle age groups being also the reproductive age groups, a population so constituted has greater powers of recuperation. Again, without a knowledge of the age constitution of the population it is impossible properly to appreciate the meaning of the birth and death-rates: the true explanation of a high death-rate in a particular area for instance may be not the unhealthiness of the locality but the high proportion of persons there living in the exposed age periods, and this cannot be ascertained without a reference to the age statistics. There are various other purposes, some practical, some academic, for which a knowledge of the number of persons living at successive ages is required. Unfortunately in India there are great difficulties in obtaining this knowledge.

3. Apart from the fact that many Hindus consider it unlucky to reveal how old they are, it is the exception for any person in India to know his own

THEIR INACCURACY.

age and for census purposes it is commonly settled much as the age of a witness in a court of law is settled, by guess work. This summary method results in the age returns being thoroughly unreliable as regards any particular individual though from the mass an actuary is able to extract a fairly reliable estimate of the age constitution of the population as a whole. Moreover, the errors being more or less constant, periodic changes can be traced with some degree of accuracy from one census to another in spite of the inaccuracy of the data. How impossible it is in present circumstances to hope to get accurate information with regard to the ages of the rural population is shown by the results of the Muzaffarpur experiment mentioned in the appendix to Chapter I in which persons were sometimes recorded as being years younger than they had been recorded twelve months previously. "All respectable Hindus keep an exact record of the birth of a child especially of a boy. Every family has its *daibajna* or astrologer who prepares a horoscope, in which he notes down the day, the hour and the minute of the birth of the child..... These papers are carefully preserved by the parents, who refer to them when anything important, good or evil, happens to the child".* Unfortunately the census is apparently not regarded as anything important, whether for good or for evil, for it is certain that horoscopes are not consulted in connexion with it.

4. In examining the age statistics it will at once be noticed that the

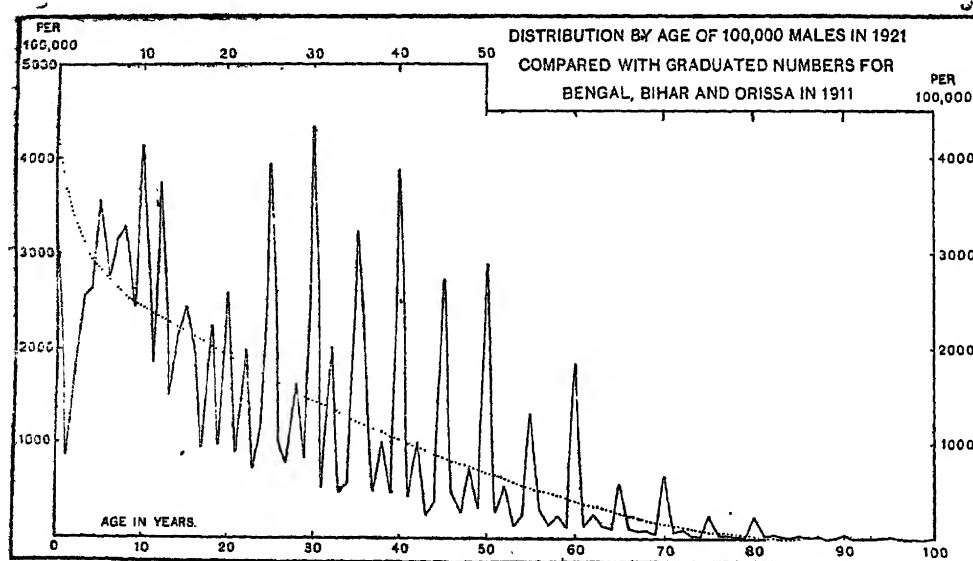
COMMON ERRORS.

figures are heaped up at certain ages. These irregularities can to some extent be explained by reference to certain well established tendencies towards error.

i. *Preference for particular numbers.*—Many thousands of persons return their age as a round number, 30, 40, 50, etc., though they are actually a few years above or below that age. There is also a similar tendency to give an age ending with 5. In England and Wales the extent to which this very common error vitiates the age returns is steadily decreasing since the establishment of civil registration and with the spread of education. In this province it is still extremely prevalent. The ages of a typical population of 335,324 Hindus and 74,762 Muhammadans were tabulated in this province by annual age periods for the use of the Government actuary: out of these 24·6 per cent. of the Hindus gave an age ending with 0, while 17·6 per cent. gave an age ending with 5; out of the Muhammadans 25·4 per cent. gave an age ending with 0 and 18·1 per cent. one ending with 5. These figures suggest that on the whole the Hindus, probably because in some cases they remember what is written in their horoscopes, know their ages better than the Muhammadans and an examination of the Hindu figures by sex

* S. C. Bose, "The Hindus as they are", page 26.

suggests that on the whole Hindu males know or are at least prepared to return their ages more accurately than Hindu females. The extent to which this kind of error obtains is shown graphically by the following diagram which shows the ages actually returned per 100,000 males of both religions as set forth in Subsidiary Table I to this chapter, and for the sake of comparison the age distribution of both sexes estimated by the actuary in 1911 for Bengal, Bihar and Orissa and Assam.* The peaks at the ages ending with 0 and 5 are conspicuous.



Whether it be owing to the quaternary system of calculation in vogue in this country or for some other reason, even numbers have some special attraction about them. In the special age return already referred to 60·5 per cent. of the Hindus and 60·4 per cent. of the Muhammadans returned their age as an even number and this tendency can be traced in the diagram also. The effects of this error are however obliterated when the ages are tabulated by quinquennial periods. With the exception of 10 no age is so commonly given amongst males in the early years as 12: in the case of females the proportion of persons at this age is not so high. The age of 3 is also popular, especially amongst Muhammadans.

ii. *Tendency to exaggerate age.*—This tendency is marked amongst the aged and results in the numbers being heaped up in the last age periods, particularly in the case of females.

iii. *Tendency to return age next birthday.*—The enumerators were instructed to enter the number of years actually completed on March 18th, 1921. For instance the correct age entry for a child who completed his fifth year on March 20th, 1921 would be 4. In such a case there would be a strong tendency to enter the age as 5, partly because the birthday was so close and partly because the fact that the child was in his fifth year naturally would suggest that the correct age to enter was 5. If the tendency to enter the age next birthday instead of the age last birthday was evenly spread over all years, the only year appreciably affected would be the first which could have no gain from any preceding year to balance its loss to that next succeeding; the number of children returned at the age 0-1 would therefore be less than the actual number. To combat this tendency in the case of children who were still in and had not completed their first year of life the staff were instructed to enter the word "infant." in the age column of the schedules. On the assumption that this instruction was effective in preventing the transference of large numbers of infants from the age 0-1

* Table C, page 175, India Census Report, Part I, 1911.

to the age 1-2, it follows that the age period which would be affected by this error is 1-2, for this period would lose to the period 2-3 while it would gain nothing from the period 0-1. The marginal statement, which shows the distribution of children under 5 years of age at the last two censuses, supports this hypothesis. It is true that the age period 1-2 in 1921 is just the age period that must have been most effected by the epidemics and scarcity of 1918-19. for children who had completed 1 year by March 18th, 1921 must have been born between the

POPULATION.		
Age.	1921.	1911.
0-1 ...	1,089,372	1,267,719
1-2 ...	365,243	501,527
2-3 ...	799,374	1,035,298
3-4 ...	1,137,511	1,266,721
4-5 ...	1,090,658	1,149,321

middle of March 1919 and the middle of March 1920 and their conception must have occurred sometime between the middle of 1918 and the middle of 1919 which is just the period when these troubles were at their worst. It is true also that there would be a tendency for enumerators to return all children at the breast as "infants" and, as children are commonly suckled throughout the second year of their life, this also would have the effect of depleting the age period 1-2. It is however probable that the error of the age-next-birthday contributed materially to this result.

iv. *Deliberate mis-statements.*—Amongst the males there is a tendency for persons who find themselves on or past the threshold of middle age, particularly if they have matrimonial projects in view, deliberately to understate their ages. In the case of females there is a strong inducement to misstate the age of unmarried women : it is a point of religious duty for a Hindu to arrange that his daughters shall be married before they attain puberty and to be the parent of an unmarried daughter who has passed that age is regarded as a disgrace; the ages of unmarried women therefore tend to be understated. On the other hand there is a tendency to overstate the age of young married girls, for in their case years give an added dignity and importance.

5. In order that the variation in the age distribution of the population since 1911 may be readily followed, the numbers are expressed in Subsidiary Table II to this chapter as proportions per 10,000 of the population. The first and most striking difference is that for both sexes in the first five years of life the proportions are markedly lower in 1921 than they were in 1911 : the percentages of the proportions in 1921 to the proportions in 1911 are given in the marginal statement. For the first two years of life the male

AGE CONSTITUTION : 1921 COMPARED WITH 1911.

Percentage of proportional number of males and females in each of first 5 years of life in 1921, to corresponding proportions in 1911.

Age.	Males.	Females.
0-1 ...	87.1	86.9
1-2 ...	73.8	73.3
2-3 ...	77.2	78.9
3-4 ...	89.6	91.8
4-5 ...	95.3	97.0

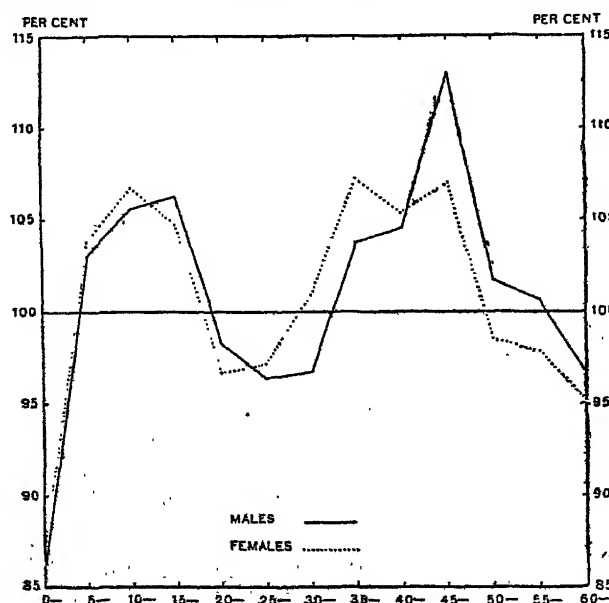
proportion is higher but in the next three years it is lower than in the case of the females, though the difference is not great. In the case of both sexes the percentage is lowest in the year 1-2 : it has already been explained how this year is liable to be depleted by the error of the age-next-birthday, but there is no reason to suppose that that error produced a greater effect in 1921 than in 1911, nor is there any reason to suppose that the proportion of babies not recorded was greater in 1921 than in 1911. The reason for the reduced proportion of children in these five years and particularly in the year 1-2 must be the influenza epidemic and the scarcity of 1918-19. The deficiency in the age period 1-2 is the direct result of the drop in the birth-rate in 1919 and that in turn is the result of the decrease in the number of conceptions in the latter months of 1918 and the early months of 1919 due to the illness, diminished fecundity, absence or death of large numbers of potential parents. The special deficiency in this year therefore is due to the large number of children who might have been but were not born. The children in the 3rd and 4th years of life must have been born before these disasters and in their case the deficiency is due to the infant mortality that occurred at the time : Subsidiary Table IX shows that the excess above the average mortality in 1918 was more marked in the age period 0-1 than in any other.

The next nine quinquennial age periods fall into groups of three. In the first three age periods, 5-10, 10-15 and 15-20, the proportion is higher for both sexes in 1921 than it was in 1911. In the next three periods 20-25, 25-30 and 30-35 the proportion for both sexes together is lower in 1921 than it was in 1911 and it is also lower for each of the sexes individually except for females in the group 30-35: the cause of this is probably the influenza and in a less degree emigration. In the periods 35-40, 40-45 and 45-50 the position is again reversed and the proportions of 1921 are higher in every case. In the next two periods the combined proportions of the sexes are approximately identical though in both sexes the proportion of males is slightly higher and that of females slightly lower than in 1911. Amongst the persons of 60 and over the proportions have declined for both males and females, indicating that the epidemics and privations of 1918 and 1919 killed off a large number of elderly persons of both sexes. The percentage of the proportions of 1921 on those of 1911 in the quinquennial age periods are given in the following statement and illustrated in the diagram that appears below it:—

PERCENTAGE OF PROPORTIONAL NUMBER OF MALES AND FEMALES IN
QUINQUENNIAL AGE GROUPS IN 1921 TO THE CORRESPONDING
PROPORTIONS IN 1911.

Age group.	Males.	Females.	Age group.	Males.	Females.
0-5	86·3	87·4	35-40	103·7	107·2
5-10	103·0	103·8	40-45	104·5	105·3
10-15	105·6	106·7	45-50	113·0	107·0
15-20	106·2	104·8	50-55	101·6	98·5
20-25	98·2	96·6	55-60	100·6	97·8
25-30	95·3	97·1	60 and over	96·6	95·2
30-35	96·6	100·8			

PROPORTIONAL NUMBER OF MALES AND FEMALES IN QUINQUENNIAL
AGE GROUPS IN 1921 AS PERCENTAGE OF CORRESPONDING PROPORTIONS IN 1911



6. The decline in the proportion in the exposed age periods which is most marked since 1911 can be traced further back by referring to the age distribution by Natural Divisions for which figures are given from 1881. In spite of generally increased emigration which reduces the proportion of persons in the middle age periods, the proportions of both sexes in the early and late age periods are lower now in all four divisions than they have ever been since 1881 and it is not perhaps merely fanciful to trace a gradual decline, especially in the first age period, beginning right back in 1881. In the last decade the most powerful influence at work in this direction was the scarcity of 1919,

while the principal cause of the reduced proportions from 20 to 35 would appear to have been the influenza epidemic. Influenza was particularly bad in Shahabad and Palamau, but the scarcity was not specially marked there and migration, which never counts for much in Palamau, has decreased in Shahabad since 1911. If therefore the age constitution of the population of Shahabad and Palamau in 1921 be compared with that of 1911 and any striking differences be observed, these may be ascribed primarily to the influenza. The comparison is made in the following statement:—

DISTRIBUTION PER MILLE OF POPULATION BY AGE GROUPS IN 1911 AND 1921
IN SHAHABAD AND PALAMAU.

AGE PERIOD.	SHAHABAD.				PALAMAU.			
	Males.		Females.		Males.		Females.	
	1921.	1911.	1921.	1911.	1921.	1911.	1921.	1911.
0-5	118	129	120	129	140	156	151	165
5-10	162	152	148	133	175	165	172	151
10-15	131	125	99	95	135	131	112	103
15-20	81	76	68	65	76	72	72	68
20-40	309	336	333	353	301	313	316	316
40-60	155	142	166	160	141	131	133	149
60 and over	44	40	66	65	32	32	44	48
	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000

The striking features of this statement, apart from the fact that Palamau with its consistently high birth-rate has a much younger population than Shahabad, are—

- (a) the marked decline of the proportion of infants;
- (b) the increased proportions in childhood and youth from the age of 5 to the age of 20;
- (c) the decline in the proportions at middle age from the age of 20 to the age of 40;

The experience of both districts for both sexes agrees up to this point.

- (d) the increase of the proportions in early old age from the age of 40 to that of 60, except amongst the females of Palamau who have declined;
- (e) an increase in the proportion of old persons in Shahabad, which is more marked in the case of the males: in Palamau the proportion of old persons is stationary in the case of males and has declined in the case of females.

The following inferences with regard to the influenza therefore seem to be legitimate. Influenza caused a high infant mortality and was the indirect cause of a large number of children not being born who otherwise would have been born: but it is impossible to isolate the effects of influenza in this respect from those of the scarcity which must also have exercised a powerful influence in the same direction. Children and young persons were less seriously affected than those of other ages. The ages from 20-40 seem to have been seriously affected: old persons suffered less, particularly the males. It may be that the age period 20-40 was affected most because it contains the greatest number of actual workers who would be liable to return to their work before they had properly recovered and would so be specially liable to contract pneumonia which was the immediate cause of death in most cases.

7. It was shown some twenty years ago that in all western countries the number of persons in the age period 15-50 is always about half the total population and that any variations that may occur in the age constitution of a people occur in one or other of the groups 0-15 or 50 and over: if the population is progressive there will be an excess in the earlier group; if

stationary, the proportionate number of persons in these two groups will approach equality; and if on the decline, the excess will be found in the later age group. The marginal statement gives the population in these three age groups in Bihar and Orissa in 1911 and 1921. It will be observed that the proposition is truer for Bihar and Orissa now than it was ten years ago when the age distribution was more normal. Ordinarily the great predominance of children in an uncontrolled population upsets the balance, but general distress such as prevailed in this province in 1919 decreases the number of persons in the early and late age periods which are most exposed, leaving a proportionately higher number in the middle periods. But in India, owing to the early age at which people grow to maturity and their relatively short expectation of life, it is not reasonable to look for this balance between the middle aged on the one hand and the young and old on the other at identically the same age periods as in the west.

	NUMBER OF PERSONS PER MILLE AGED		
	0-15	15-50	50 and over.
1921 ...	397	496	107
1911 ...	402	488	110

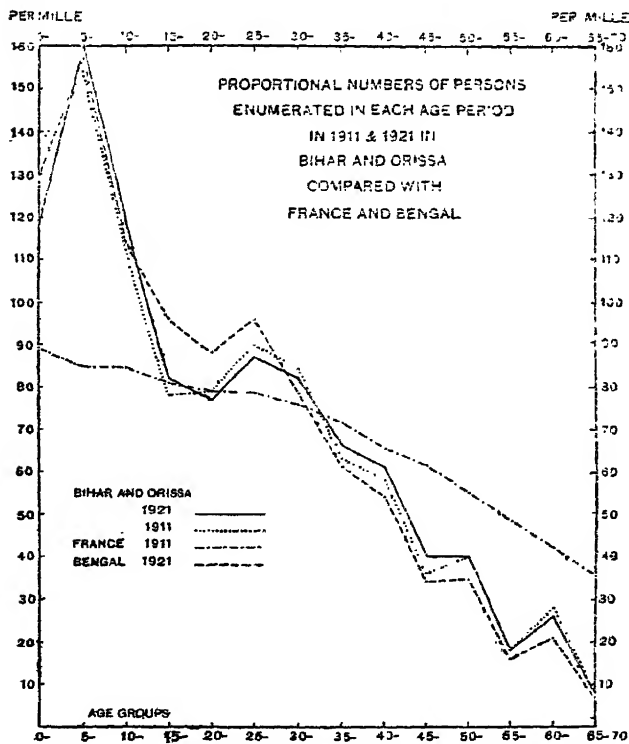
8. The age distribution of the population of Bihar and Orissa may be regarded as typical of a population amongst which the birth-rate is not deliberately controlled. Preventive measures of various degrees of violence to stop the birth of illegitimate and unwelcome children are not unknown and it is probable that a handful of persons who have been to Europe have learnt the methods of birth control which are both practised and preached there, but enquiries made from a number of experienced Indian doctors prove conclusively that deliberate contraception is not practised amongst the people generally. It is therefore interesting to compare the age constitution of the population of this province where birth control is for all practical purposes unknown with that of France where birth control began earlier and has produced more effect than in any other country. This is therefore done in the following table and diagrams which compare the number of persons per 1,000 of the population enumerated at each quinquennial age period in Bihar and Orissa in 1921 and in France in 1911. The age distribution of the population of Bengal in 1921 is also given in the table and plotted on the diagrams in order to illustrate the effects of migration and a less severe incidence of influenza on the age-distribution :—

COMPARISON WITH WESTERN
COUNTRIES AND BENGAL.

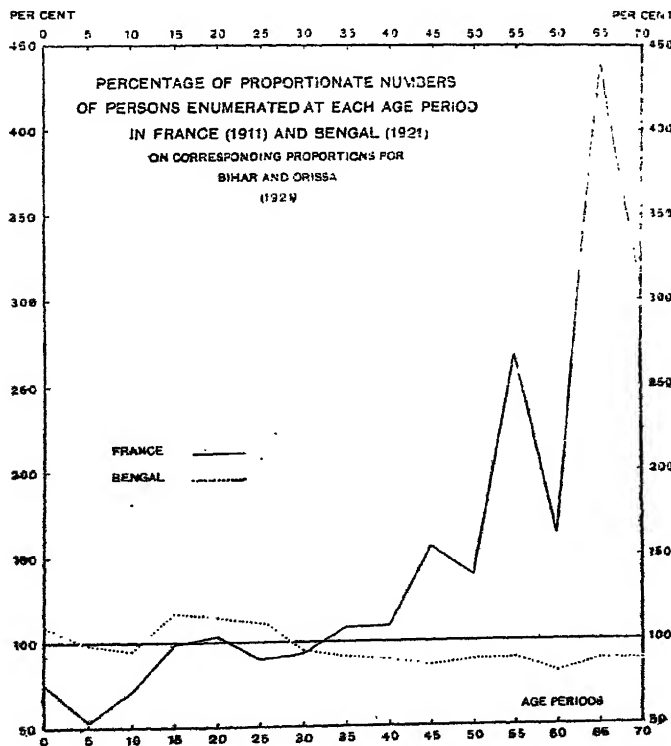
PROPORTIONATE NUMBER OF PERSONS ENUMERATED AT EACH AGE
PERIOD PER MILLE OF POPULATION.

AGE PERIOD.	BIHAR AND ORISSA. 1921.	FRANCE. 1911.	Percentage of Column 3 on Column 2.	BENGAL. 1921.	Percentage of Column 5 on Column 2.
1	2	3	4	5	6
0-5 ...	118	89	75	129	109
5-10 ...	160	85	53	157	98
10-15 ...	119	84	71	114	95
15-20 ...	82	81	99	96	117
20-25 ...	77	79	103	88	114
25-30 ...	87	78	90	96	110
30-35 ...	82	76	93	78	95
35-40 ...	66	71	108	61	92
40-45 ...	61	66	108	54	89
45-50 ...	40	62	155	34	85
50-55 ...	40	55	138	35	88
55-60 ...	18	48	267	16	89
60-65 ...	26	42	162	21	81
65-70 ...	8	35	438	7	88
70 and over ...	16	49	306	14	88

The noticeable feature about the first diagram is that at the earlier age periods the provincial line rises high above the French line; then it temporarily



drops below it between the ages of 15 and 20, probably owing to mis-statements of age because from 25 to 30 it is again well above it; between 30 and 35 it finally crosses the French line and continues to sink away below it till the edge of the diagram is reached. The limitation of the supply of babies in France reduces the proportionate numbers of persons in the lower and thereby automatically increases the proportions in the higher age periods. The decline in the birth-rate became noticeable in England and Wales also in 1877 and if a line for those two countries was plotted on the diagram it would start at 107; as in the case of France it would cross the provincial line between 30 and 35, and finally



reach 22 at the period 65-70, roughly representing a mean between the lines of France and this province. As compared with Bihar and Orissa, Bengal has more babies and more middle aged but fewer elderly people. This is what might be expected. Influenza was less deadly in Bengal than in any other province and therefore presumably affected the birth-rate less than elsewhere; nor is scarcity felt in Bengal as it is felt in this province. When the rains failed in 1918 the population did not emigrate *en masse* as it did from Bihar and Orissa so that the number of conceptions

cannot have been so seriously affected as it was here. Finally as the result of immigration there is a heaping up in the early middle age periods in which the immigrants are included. The result is that the proportions in the more advanced periods are reduced, and that the population of Bengal is distinctly younger than that of Bihar and Orissa, as is clearly shown in the second diagram.

9. The contrast with the regulated populations of the west may be further illustrated by comparison between the birth and death-rates. In England and Wales for the period 1901-1910 the annual birth-rate was 27.2 and the death-rate 15.4 per mille, the difference, or survival rate, being 11.8 per mille. This

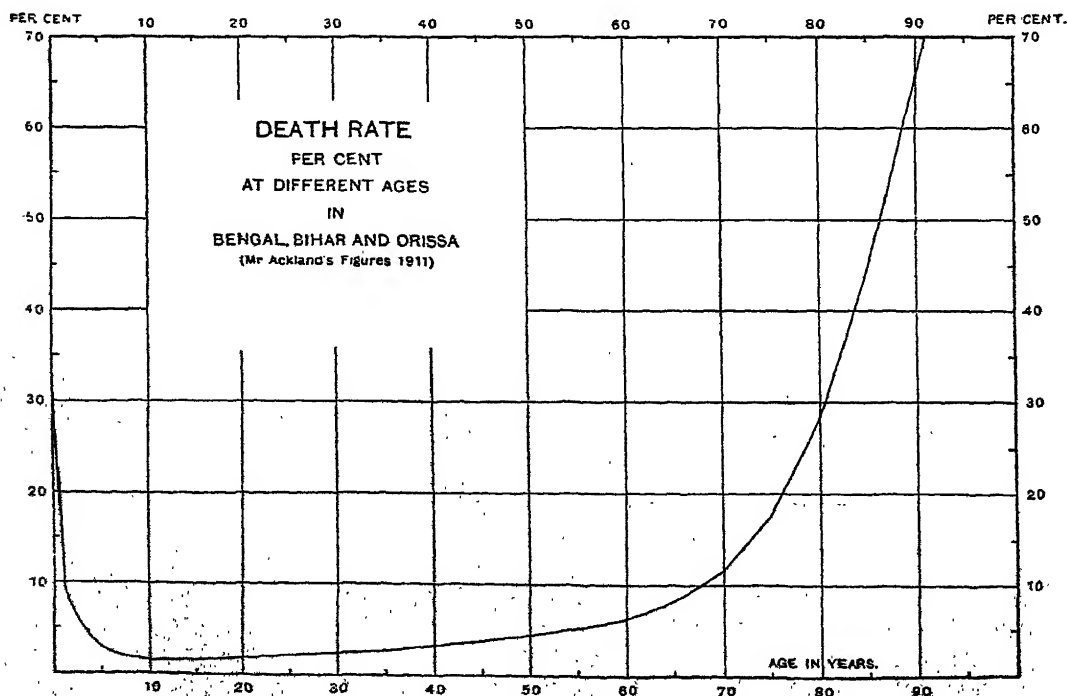
SURVIVAL RATE.

figure may be compared with the following statistics for Bihar and Orissa. These statistics are not accurate but, if they were, the contrast with the English birth and death-rates would be even more marked than it is :—

	Bihar and Orissa.		North Bihar.		South Bihar.		Orissa.		Chota Nagpur Plateau.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1911—1920—										
Birth-rate ...	41	37	41	37	44	40	40	35	38	35
Death-rate ...	37	33	33	33	40	38	39	35	32	29
Survival rate ...	4	4	8	4	4	2	1	0	6	6
1901—1910—										
Birth-rate ...	43	39	43	38	45	41	41	37	43	40
Death-rate ...	37	33	38	33	42	40	38	35	30	26
Survival rate ...	6	6	5	5	3	1	3	2	13	14

The birth-rate in Bihar and Orissa is much higher than it is in England, but so also is the death-rate with the result that the survival rate in England is a great deal higher than it is in this province. So true is it that a high birth-rate does not by any means necessarily lead to a rapid increase in the population.

10. The high death-rate which prevents the rapid increase of the population is most marked in the early years. In the margin is reproduced a diagram showing the death-rates at different ages calculated by Mr. Ackland in 1911 for the Bengal Presidency, which for this purpose included Bihar and Orissa. The lower on the diagram the line falls the better is the chance of surviving. Only the male line is plotted for the female line would be hardly distinguishable from it; it would start and end below the male line but be above it from the 9th to the 33rd year of age. Rather more than one-fifth of the children born in Bihar and Orissa died in the first year of their life during the last decade, *viz.*, 235 males and 204 females per mille born. These figures compare favourably with the corresponding figures of the preceding decade, 304 and 262, but it is doubtful if too much importance should be attached to



the difference. The ignorance and insanitary conditions of child-birth that lead to the high infant mortality in India are well-known and *a priori* it is difficult to suppose that these conditions have improved so much in the last ten years as to reduce the rate of infant mortality to the extent shown. It is however still nearly twice as high as the corresponding rate in France or

England. The relatively greater delicacy of male infants will be noticed: the birth-rate in their case is distinctly higher though it is certain that they receive on the whole more care and attention than female infants.

11. Nor does the high birth-rate mean that married women are potentially or actually more fertile than in countries where the birth-rate is lower. The average annual number of births per 1,000 married women of reproductive age (15-45) in Bihar and Orissa in the last decade was 184.7. In England and Wales the number of married women of that age in 1911 was 4,287,421: calculated on this figure the number of births registered in 1911 (881,138) gives a rate of 205.5. More lives therefore come into existence and the crude birth-rate is higher in Bihar and Orissa owing to the universality of marriage: but proportionately to the number of married women at the reproductive ages the birth-rate is lower. Moreover the lives that are brought into existence in this province pass out of it more quickly. According to the actuarial calculations made on the last census the expectation of life at the age 0-1 in the Bengal Presidency was 21.47 years for males and 21.58 years for females, or less than half the expectation of life at that age in England.

12. The proportions of the young and the old to the middle age in this province are shown in Subsidiary Tables V and V-A which show for districts and religions respectively the proportion of children under 10 and persons over 60 to those aged 15-40 and the percentage of females at the reproductive ages. The proportion of children of both sexes in the first five years of life per mille of the population is highest in Chota Nagpur and lowest in Orissa: it is natural therefore that the proportion of children under 10 to the middle-aged generally and to married females at the reproductive ages in particular should be highest and lowest in the same areas. In Ranchi, where children are relatively most numerous, there are 85 children under 10 to every 100 persons aged 15-40 and 210 to every 100 married women of these ages. In the Chota Nagpur States the proportion of children to married women at the reproductive ages is even higher while in Singhbhum it is not quite so high but the proportion per 100 middle-aged persons is lower in each case: the explanation of the high proportion of children to middle-aged persons in Ranchi is probably to be found therefore partly in the emigration of the middle-aged, especially males, from this district. In Palamau also the proportion of children to the middle-aged is high, but here the proportion of females who are married and at the reproductive ages is markedly higher than in Ranchi while the proportion of children to them is markedly lower, which points to the fact that families are smaller in Palamau. At the other end of the scale, as in 1911, stands Balasore where the percentage of children to the middle-aged is only 52 and to married women at the reproductive ages only 128: in this district the percentage of married women at the reproductive ages is high so that families must be exceptionally small. The question of the size and sex constitution of families is dealt with in greater detail in a note which forms an appendix to Chapter VI.

13. The part of the province that offers most hope of a long life is South Bihar and in South Bihar the proportion of the aged is largest in Patna where the percentage of persons of 60 and over to those aged 15-40 is 17 in the case of males and 20 in the case of females. This may in part be ascribed to the low proportion of children under 10 and to the fact that the middle-aged emigrate in large numbers: partly also it may be due to the fact that plague tends to attack the middle-aged, but the main cause of the pre-eminence of Patna in this respect is its relative immunity from malaria, statistics showing that the death-rate from "fever" in this district is habitually lower than

in Gaya, Shahabad, or Monghyr. After South Bihar comes North Bihar, but here the average is reduced by the very small proportion of old persons alive in Purnea, where the unhealthiness of the district combined with a steady inflow of immigrants at the younger ages has reduced the proportion of old people to half what it is in Patna. In Orissa, Balasore is as conspicuous for the absence of old persons as it is for the absence of children: the percentage of persons of both sexes aged 60 and over is markedly less than in Puri or Cuttack. The proportion of old persons is least in Chota Nagpur where the low standard of comfort and the habit of living for the day amongst the aboriginal tribes do not conduce to longevity: the ratio is reduced also by the high proportion of young children.

14. As regards the distribution of the middle-aged there is little that calls for remark. It may however be observed that the proportionate number of persons between the ages 10-20 is highest in Orissa, which suggests that it was the young who escaped most lightly from the agricultural distress of 1919. From 20-40 the proportions for both sexes are highest in Bihar where emigration has declined while it has increased in the rest of the province.

15. The general effect of the epidemics and scarcity of the latter half of the decade on the age distribution of the population as a whole has already been stated. Subsidiary Table VI enables their effect to be traced in the variations of the Natural Divisions. All divisions show the reduction at the age 0-10, but the reduction is much more marked in Orissa than elsewhere. It has already been explained that the continued distress followed by wholesale emigration produced a more depressing effect upon the birth-rate than the influenza epidemic, and Orissa was the area in which the agricultural distress was most severe and prolonged and the influenza least deadly. At the age period 10-15 all divisions show an increase, particularly the Chota Nagpur Plateau. The persons in this age period were least affected either by the epidemics or the scarcity and were not of an age to emigrate. At the age 15-40 there is a big decrease in Orissa as is natural for this is the age of emigration and emigration has increased in Orissa. In order to show that it is the middle-aged who migrate, the age distribution of the population of the Jherria coal-field may be examined. This is an industrial area containing immigrants in large numbers, for three-fifths of the male and one-half of the female population enumerated there came from outside the district: the percentages of males and females at the age period 15-40 in this area were respectively 64 and 56 against 39 and 40 in the general population. There is also a big decrease in South Bihar from which emigration has on the whole decreased, but South Bihar suffered worse from influenza than other parts of the province and it was to persons in the age period 20-40 that influenza seems to have been specially fatal. At the age period 40-60 the increase is general and fairly equal. Above the age of 60 South Bihar for reasons already explained shows an increase while Orissa, where the continued strain of the last few years proved altogether too much for persons who were too old to emigrate, shows a heavy decrease of 15.9 per cent. This contrast again goes to prove that the scarcity was a more potent influence in reducing the population at both the exposed age periods than was the influenza.

16. In some countries interesting contrasts by locality can be drawn between the age constitutions of the population of urban and rural areas and of different types of town. The distinction of urban and rural is so slight in Bihar and Orissa that little would be gained from attempting such a comparison in any detail: moreover the various types of towns are not differentiated to any extent. There is however one striking exception to this proposition: Jamshedpur unlike the other towns of the province, is a purely industrial town and this fact is reflected in the age constitution of its population. By way of contrast the following table shows the distribution per mille in quinquennial age periods of the population of (i) the province,

AGE CONSTITUTION OF CITY
POPULATIONS.

(ii) the cities of Patna, Gaya and Bhagalpur, as typical of the towns of the province, and (iii) Jamshedpur.

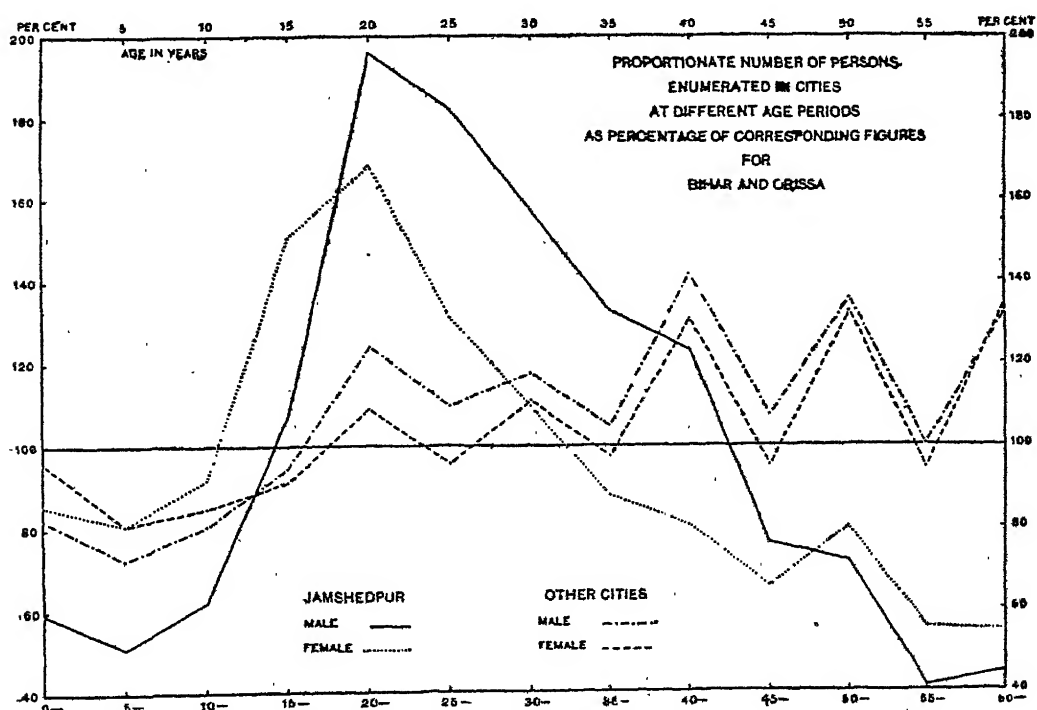
PROPORTION PER MILLE OF POPULATION AT DIFFERENT AGE PERIODS.

AGE PERIODS.	BIHAR AND ORISSA.		PATNA, GAYA AND BHAGALPUR CITIES.		JAMSHEDPUR.	
	Males.	Females.	Males.	Females.	Males.	Females.
0-5	116	120	95	115	69	102
5-10	164	156	118	126	83	126
10-15	131	108	105	91	81	99
15-20	86	79	81	72	92	119
20-25	71	82	88	89	139	138
25-30	84	90	92	86	161	118
30-35	80	85	94	94	126	93
35-40	67	65	70	63	89	57
40-45	60	62	85	81	74	50
45-50	42	58	45	36	32	25
50-55	39	40	53	53	28	32
55-60	17	18	17	17	7	10
60 and over	43	57	57	77	19	31

In the following table the proportionate number of persons enumerated in (a) Patna, Gaya and Bhagalpur cities and (b) Jamshedpur are expressed as percentages of the corresponding figures for the whole province :—

	OTHER CITIES.		JAMSHEDPUR.	
	Males.	Females.	Males.	Females.
0-5	81.9	95.8	95.5	85.0
5-10	72.0	80.8	50.6	80.8
10-15	80.2	84.3	61.8	91.7
15-20	94.2	91.1	107.0	150.6
20-25	123.9	108.5	195.8	168.3
25-30	109.5	95.5	191.7	131.1
30-35	117.5	110.6	157.5	109.4
35-40	104.5	96.9	132.8	87.7
40-45	141.7	130.6	123.3	80.6
45-50	107.1	94.7	76.2	65.8
50-55	135.9	132.5	71.8	80.0
55-60	100.0	94.4	41.2	55.6
60 and over	132.6	135.1	44.2	54.2

These figures are illustrated in the following diagram :—



The results are what would be expected. The proportion of young children is smaller in the three cities than in the province as a whole but not so small as it is in Jamshedpur. The proportion of male children is smaller than that of female children but this is owing to the higher proportions of males in the middle age periods, for the difference between the absolute figures is not great. At the working ages the city proportions increase, the male percentages being generally higher than those of the females. In the case of the three cities the provincial average is passed at the age 20-25 and, allowing for the irregularities of the female line, this relative position is maintained till the end. In the case of Jamshedpur the proportion of males exceeds the provincial average from 15-20 to 40-45 and that of females exceeds it from 15-20 to 30-35. Generally speaking therefore the population of the cities differs from the provincial population in having a higher proportion of persons, especially males, in the middle working age periods. This distribution is especially pronounced in the case of Jamshedpur, where not only is the proportion of children lower than in the other three cities, but the proportion of old persons is only about half the provincial average.

17. Subsidiary Table III shows the proportional age distribution by religion. The Christians, as in 1911, have the highest proportion of persons in the first five years of life and they also have the smallest proportion of old persons. Most of the adherents of this religion are aboriginals in

Chota Nagpur and their age distribution is therefore very similar to that of the Animists, who come next to them. Amongst the Animists both sexes marry on attaining puberty to persons of about their own age and there is no bar on the marriage of widows. They are therefore prolific, the proportion of children to married females aged 15-40 being 212 against the provincial average of 167; but their standard of comfort is not conducive to a long duration of life so that their proportion of persons aged 60 and over per cent. of those aged 15-40 is 9 only against the provincial average of 11. Hindus and Muhammadans whose standard of comfort is generally higher both have a lower proportion of children and a higher proportion of old persons. As between these two religions the Hindus are less numerous in the early and late age periods; in middle age from 15 to 60 their proportions are higher as is shown in the marginal statement. The relatively large proportion of Hindu widows at the reproductive ages who are not exposed to the dangers of child-birth contributes to this result in the case of the females while the number of widows is increased by the fact that Hindu girls tend to marry husbands considerably older than themselves.

AGE.	Percentage of proportionate number of Muhammadans per mille at certain age periods to corresponding number of Hindus.	
	Males.	Females.
0-5	109·8	108·1
5-10	106·9	104·8
10-15	100·5	94·9
15-20	95·9	96·4
20-40	94·7	99·8
40-60	95·8	94·4
60 and over...	108·5	101·9

18. The proportions of the sexes at different age periods will be discussed in the next chapter, it may however be mentioned here that the proportion of males exceeds the proportion of females at the same age periods as in 1911, namely at 5-10, 10-15 and 15-20 and again at 35-40 and 45-50. The proportion of both sexes in the first and last age periods, 0-5 and 60 and over, are as would be expected lower than they were ten years ago; the male proportions in the age groups 20-25, 25-30 and 30-35 are also lower than they were while the groups in which the female proportions have dropped are 20-25, 25-30, 50-55 and 55-60.

SUBSIDIARY TABLE I.—AGE DISTRIBUTION OF 100,000 OF EACH SEX BY ANNUAL PERIODS.

AGE.	MALES.			FEMALES.		
	Hindu.	Muhammadian.	Average.	Hindu.	Muhammadian.	Average.
1	2	3	4	5	6	7
Total	100,000	100,000	100,000	100,000	100,000	100,000
0	3,053	3,443	3,091	2,645	2,653	2,916
1	901	807	852	572	979	833
2	1,508	2,240	1,851	1,019	2,263	2,043
3	2,510	3,123	2,571	2,715	2,489	2,322
4	2,505	3,207	2,629	2,620	2,972	2,655
5	2,454	4,230	3,559	3,491	3,593	3,504
6	2,644	3,510	2,761	2,746	4,073	2,839
7	3,089	3,435	3,127	2,970	3,146	2,968
8	3,202	4,065	3,288	2,805	3,240	2,848
9	2,426	2,764	2,460	2,205	2,601	2,194
10	4,078	4,547	4,155	3,431	3,382	3,429
11	1,589	1,453	1,545	1,447	1,237	1,426
12	3,735	3,755	3,740	2,915	2,587	2,885
13	1,553	1,040	1,502	1,054	790	1,055
14	2,171	1,525	2,106	1,579	1,304	1,551
15	2,422	2,495	2,430	2,046	2,020	2,046
16	1,980	1,974	1,988	1,963	1,876	1,926
17	924	580	944	893	582	871
18	2,245	2,040	2,225	2,000	2,185	2,078
19	1,013	740	986	1,016	738	988
20	2,592	2,571	2,590	3,185	3,280	3,195
21	936	623	896	942	746	922
22	2,014	1,702	1,983	2,170	1,955	2,151
23	766	412	731	812	520	783
24	1,234	917	1,202	1,365	1,185	1,347
25	3,043	3,033	3,042	4,020	3,944	4,020
26	1,028	915	1,018	1,105	1,286	1,133
27	604	650	789	640	553	901
28	1,035	1,416	1,616	2,000	1,481	2,007
29	667	400	830	710	552	732
30	4,297	4,491	4,316	4,755	4,237	4,733
31	529	390	515	538	1,145	599
32	2,070	1,068	2,030	2,017	1,465	1,962
33	489	325	473	512	273	488
34	605	401	585	682	400	654
35	3,229	3,120	3,218	2,871	3,400	2,930
36	1,453	1,377	1,472	1,415	1,237	1,397
37	516	244	489	502	1,150	568
38	1,081	656	1,021	1,073	852	1,051
39	497	381	485	594	685	601
40	3,888	3,947	3,876	4,304	4,479	4,321
41	443	306	429	415	281	402
42	1,033	690	999	995	688	964
43	253	174	245	288	876	347
44	406	177	383	444	313	421
45	2,097	2,882	2,715	2,575	2,322	2,550
46	473	255	451	409	301	382
47	301	165	287	297	675	335
48	752	409	727	784	1,268	832
49	318	190	306	328	1,005	396
50	2,888	2,927	2,892	3,161	3,091	3,172
51	275	140	282	251	174	243
52	501	350	541	532	355	515
53	146	59	137	175	88	166
54	255	165	246	268	133	246
55	1,324	1,131	1,304	1,316	1,182	1,213
56	316	247	309	329	247	321
57	152	115	148	186	96	177
58	260	219	256	303	183	281
59	112	126	113	147	112	144
60	1,803	2,108	1,843	2,570	2,740	2,588
61	136	59	128	154	96	148
62	237	303	253	293	182	282
63	71	575	121	91	68	89
64	78	322	102	143	78	187
65	575	547	572	745	678	738
66	100	171	107	100	65	97
67	83	149	90	74	65	73
68	85	84	85	110	91	105
69	60	39	58	57	65	58
70	617	737	629	576	920	970
71	53	297	77	43	53	44
72	87	350	113	99	229	112
73	22	14	21	21	112	30
74	22	6	20	39	104	45
75	234	325	243	201	247	287
76	47	22	45	26	29	26
77	53	14	48	14	10	14
78	29	14	28	41	21	39
79	8	6	8	16	21	17
80	221	258	225	299	418	311
81	13	39	16	14	18	14
82	22	8	21	14	44	17
83	4	6	4	2	23	4
84	8	20	9	10	10	10
85	39	42	39	53	67	54
86	9	32	10	4	10	5
87	26	.....	23	8	8	8
88	4	3	4	11	3	10
89	3	6	3	7	16	8
90	36	59	38	46	93	51
91	3	.....	3	3	3	3
92	2	25	4	2	.....	2
93	.....	11	1	1	.....	1
94	1	3	1	2	.....	2
95	10	8	10	10	23	11
96	2	.....	2	4	8	4
97	.....	.....	.....	2	.....	2
98	2	.....	2	1	.....	1
99	2	.....	2	12	23	13
100	11	20	12	12	23	13

SUBSIDIARY TABLE II.—AGE DISTRIBUTION OF 10,000 OF EACH SEX IN THE PROVINCE AND EACH NATURAL DIVISION.

PART I.

BENGAL, BIHAR AND ORISSA. (Five censuses).

Age.	1921.		1911.		1901.		1891.		1881.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1	2	3	4	5	6	7	8	9	10	11
BENGAL, BIHAR AND ORISSA.										
0-1	286	207	316	326	385	391	317	333	232	233
1-3	109	116	137	143	138	160	141	152	235	250
3-4	325	253	283	310	397	338	393	323	393	332
4-5	282	336	312	351	314	351	335	373	351	394
5-10	284	302	395	303	293	306	307	318	320	330
10-15	1,596	1,533	1,551	1,538	1,531	1,400	1,556	1,474	1,554	1,444
15-20	1,274	1,052	1,209	994	1,247	1,015	1,219	974	1,139	901
20-25	579	923	940	800	856	896	818	837	756	765
25-30	758	904	759	903	753	884	702	827	711	843
30-35	903	935	908	933	793	905	850	894	859	934
35-40	801	793	857	859	777	785	778	819	859	850
40-45	676	550	573	547	598	551	645	609	629	551
45-50	588	359	370	333	373	330	365	318	353	338
50-55	367	371	367	384	392	406	394	410	409	441
55-60	170	193	170	169	168	168	167	168	163	165
60 and over	415	494	437	535	440	567	463	605	478	639
Unspecified	...	...	...	...	...	...	...	...	5	5
Mean Age	24.0	24.0	23.8	24.0	23.9	24.3	23.9	24.5	24.1	25.0
NORTH BIHAR.										
0-5	1,139	1,195	1,286	1,310	1,374	1,300	1,298	1,374	1,375	1,440
5-10	1,651	1,550	1,610	1,498	1,563	1,453	1,616	1,488	1,573	1,457
10-15	1,237	980	1,211	946	1,261	987	1,214	957	1,144	892
15-20	837	719	786	692	824	749	764	680	716	645
20-25	3,043	3,283	3,053	3,292	3,008	3,221	2,961	3,196	3,084	3,270
25-30	1,619	1,636	1,566	1,598	1,589	1,619	1,654	1,643	1,643	1,644
30-35	474	637	480	605	481	602	493	663	460	638
35-40	...	...	...	...	...	...	...	...	5	5
40-45	...	...	...	...	...	...	...	...	...	...
45-50	...	...	...	...	...	...	...	...	...	...
50-55	...	...	...	...	...	...	...	...	...	...
55-60	...	...	...	...	...	...	...	...	...	...
60 and over	...	...	...	...	...	...	...	...	...	...
Unspecified	...	...	...	...	...	...	...	...	...	...
Mean Age	24.6	25.8	24.3	25.7	24.4	25.7	24.5	25.6	24.4	25.5
SOUTH BIHAR.										
0-5	1,137	1,203	1,282	1,330	1,259	1,291	1,301	1,363	1,445	1,505
5-10	1,590	1,475	1,515	1,411	1,373	1,251	1,525	1,386	1,473	1,330
10-15	1,234	986	1,187	947	1,218	975	1,262	1,000	1,127	887
15-20	805	737	742	675	835	759	769	688	606	634
20-25	3,000	3,238	3,150	3,322	3,157	3,324	2,953	3,160	3,034	3,216
25-30	1,724	1,679	1,628	1,629	1,647	1,696	1,673	1,699	1,654	1,704
30-35	530	682	491	666	611	702	618	704	635	738
35-40	...	...	...	...	...	...	...	...	6	6
40-45	...	...	...	...	...	...	...	...	...	...
45-50	...	...	...	...	...	...	...	...	...	...
50-55	...	...	...	...	...	...	...	...	...	...
55-60	...	...	...	...	...	...	...	...	...	...
60 and over	...	...	...	...	...	...	...	...	...	...
Unspecified	...	...	...	...	...	...	...	...	...	...
Mean Age	25.2	26.1	24.8	25.9	25.1	26.5	24.6	26.0	24.8	26.2
ORISSA.										
0-5	1,053	978	1,352	1,314	1,306	1,305	1,246	1,398	1,447	1,492
5-10	1,522	1,314	1,438	1,323	1,319	1,247	1,438	1,343	1,551	1,416
10-15	1,434	1,201	1,317	1,128	1,273	1,083	1,370	1,164	1,348	978
15-20	935	883	878	854	952	841	1,020	847	805	719
20-25	3,085	3,273	3,116	3,198	3,048	3,033	2,963	2,884	3,123	3,065
25-30	1,707	1,780	1,551	1,673	1,693	1,747	1,614	1,680	1,481	1,630
30-35	400	530	450	615	437	644	449	700	487	734
35-40	...	...	...	...	...	...	...	...	8	8
40-45	...	...	...	...	...	...	...	...	...	...
45-50	...	...	...	...	...	...	...	...	...	...
50-55	...	...	...	...	...	...	...	...	...	...
55-60	...	...	...	...	...	...	...	...	...	...
60 and over	...	...	...	...	...	...	...	...	...	...
Unspecified	...	...	...	...	...	...	...	...	...	...
Mean Age	24.4	25.9	24.2	25.6	24.4	25.7	23.9	25.6	23.5	25.4
CHOTA NAGPUR PLATEAU.										
0-5	1,319	1,288	1,470	1,534	1,410	1,524	1,494	1,605	1,568	1,713
5-10	1,709	1,682	1,684	1,616	1,660	1,630	1,770	1,686	1,771	1,654
10-15	1,404	1,194	1,282	1,083	1,382	1,144	1,373	1,136	1,216	951
15-20	845	806	844	834	894	887	823	814	764	768
20-25	3,027	3,135	3,029	3,090	2,893	2,980	2,783	2,941	2,943	3,060
25-30	1,417	1,396	1,350	1,361	1,399	1,356	1,324	1,361	1,361	1,322
30-35	329	430	361	476	357	470	382	504	380	502
35-40	...	...	...	...	...	...	...	...	4	5
40-45	...	...	...	...	...	...	...	...	...	...
45-50	...	...	...	...	...	...	...	...	...	...
50-55	...	...	...	...	...	...	...	...	...	...
55-60	...	...	...	...	...	...	...	...	...	...
60 and over	...	...	...	...	...	...	...	...	...	...
Unspecified	...	...	...	...	...	...	...	...	...	...
Mean Age	22.9	23.4	22.5	23.2	22.4	23.0	22.1	22.8	22.3	22.8

PART II.

BIHAR AND ORISSA (Two censuses).

BIHAR AND ORISSA.					BIHAR AND ORISSA.				
Age.	1921.		1911.		Age.	1921.		1911.	
	Males.	Females.	Males.	Females.		Males.	Females.	Males.	Females.
	1	2	3	4		5	6	7	8	9
0-1	290	284	333	327	25-30	844	899	876	926
1-2	98	95	130	131	30-35	708	851	830	844
2-3	303	217	263	275	35-40	688	658	644	609
3-4	253	315	318	343	40-45	602	618	676	657
4-5	235	290	290	299	45-50	417	585	369	353
5-10	1,641	1,555	1,593	1,498	50-55	380	401	383	407
10-15	1,310	1,277	1,241	1,009	55-60	175	181	174	133
15-20	898	787	801	751	60 and over	430	571	445	600
20-25	713	823	726	851	Mean Age	24.1	25.1	22.3	24.9

SUBSIDIARY TABLE III.—AGE DISTRIBUTION OF 10,000 OF EACH SEX IN EACH MAIN RELIGION.

PART I.

BENGAL, BIHAR AND ORISSA (Five censuses).

AGE.	1921.		1911.		1901.		1891.		1881.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1	2	3	4	5	6	7	8	9	10	11
HINDU.										
0-5	1,100	1,200	1,209	1,246	1,253	1,240	1,298	1,296	1,267	1,441
5-10	1,513	1,409	1,478	1,450	1,433	1,400	1,493	1,419	1,404	1,387
10-15	1,246	1,032	1,103	974	1,215	994	1,202	966	1,116	991
15-20	885	879	845	860	871	850	869	869	771	742
20-30	3,206	3,274	3,221	3,236	3,145	3,167	3,066	3,150	3,153	3,234
30-40	1,009	1,530	1,555	1,545	1,615	1,606	1,606	1,600	1,609	1,630
40-50	423	537	455	550	405	622	478	651	481	679
50 and over	...	...	...	...	...	...	...	...	...	...
Unspecified	...	...	...	...	...	...	...	...	...	...
Mean Age	24.6	24.7	24.4	25.0	24.0	25.3	24.5	25.4	24.5	25.6
MUHAMMADAN.										
0-5	1,308	1,452	1,467	1,601	1,451	1,573	1,555	1,683	1,537	1,619
5-10	1,701	1,723	1,693	1,656	1,661	1,638	1,645	1,654	1,648	1,634
10-15	1,309	1,064	1,243	1,069	1,253	1,062	1,230	993	1,171	913
15-20	536	1,001	829	966	823	943	791	891	729	612
20-30	3,041	3,150	2,993	3,074	2,965	3,054	2,905	3,050	2,662	3,100
30-40	1,355	1,210	1,357	1,225	1,392	1,224	1,422	1,324	1,474	1,428
40-50	390	301	413	436	425	477	440	527	475	680
50 and over	...	...	...	...	...	...	...	...	...	...
Unspecified	...	...	...	...	...	...	...	...	...	...
Mean Age	23.0	22.2	22.8	22.2	23.0	22.7	23.0	23.1	23.4	23.9
CHRISTIAN.										
0-5	1,315	1,368	1,528	1,630	1,360	1,540	1,505	1,674	1,413	1,603
5-10	1,554	1,640	1,467	1,574	1,475	1,585	1,511	1,579	1,380	1,502
10-15	1,422	1,352	1,321	1,210	1,362	1,247	1,213	1,223	1,093	1,033
15-20	926	917	814	671	807	684	654	676	618	612
20-30	3,034	3,036	3,166	3,010	3,174	3,002	3,073	2,973	3,600	3,115
30-40	1,408	1,265	1,327	1,264	1,373	1,243	1,344	1,233	1,370	1,257
40-50	341	402	347	426	360	425	362	439	299	501
50 and over	...	...	...	...	...	...	...	...	...	...
Unspecified	...	...	...	...	...	...	...	...	...	...
Mean Age	22.9	22.5	22.6	22.3	23.0	22.4	22.6	22.2	23.5	22.9
ANIMIST.										
0-5	1,321	1,357	1,573	1,644	1,517	1,612	1,623	1,735	...	...
5-10	1,752	1,604	1,756	1,696	1,516	1,733	1,598	1,767	...	...
10-15	1,385	1,222	1,301	1,184	1,432	1,215	1,415	1,186	...	...
15-20	808	917	840	864	850	914	815	859	Not available	...
20-30	2,898	3,066	2,897	2,975	2,662	2,861	2,538	2,757	...	...
30-40	1,428	1,306	1,315	1,219	1,394	1,233	1,309	1,234	...	...
40-50	350	408	378	439	369	430	403	472	...	...
50 and over	...	...	...	...	...	...	...	...	...	...
Unspecified	...	...	...	...	...	...	...	...	...	...
Mean Age	22.6	22.7	22.0	22.1	21.7	21.0	21.5	21.8	...	...

PART II.

BIHAR AND ORISSA (Two censuses).

AGE.	1921.		1911.	
	Males.	Females.	Males.	Females.
1	2	3	4	5
HINDU.				
0-5	1,124	1,180	1,310	1,345
5-10	1,619	1,567	1,563	1,474
10-15	1,298	1,069	1,229	1,000
15-20	856	781	805	746
20-30	3,053	2,842	3,117	3,257
30-40	1,616	1,610	1,623	1,567
40-50	484	551	448	611
50 and over	...	...	...	...
Mean Age	24.3	25.3	24.0	25.2
MUHAMMADAN.				
0-5	1,245	1,276	1,403	1,414
5-10	1,720	1,611	1,718	1,563
10-15	1,504	1,014	1,255	960
15-20	821	753	764	697
20-30	2,891	2,304	2,587	3,235
30-40	1,533	1,520	1,474	1,513
40-50	471	582	489	629
50 and over	...	...	...	...
Mean Age	23.8	24.0	23.5	24.9
CHRISTIAN.				
0-5	1,420	1,447	1,714	1,744
5-10	1,718	1,732	1,658	1,674
10-15	1,532	1,403	1,450	1,254
15-20	937	883	814	816
20-30	2,776	2,852	2,770	3,651
30-40	1,285	1,253	1,245	1,244
40-50	322	386	331	417
50 and over	...	...	...	...
Mean Age	21.7	22.1	21.3	21.8
ANIMIST.				
0-5	1,317	1,364	1,587	1,633
5-10	1,730	1,688	1,774	1,688
10-15	1,456	1,251	1,345	1,162
15-20	890	901	865	884
20-30	2,649	3,020	2,796	3,538
30-40	1,374	1,368	1,370	1,250
40-50	328	418	363	445
50 and over	...	...	...	...
Mean Age	22.2	22.9	21.3	22.2

SUBSIDIARY TABLE IV.—AGE DISTRIBUTION OF 1,000 OF EACH SEX IN CERTAIN CASTES.

CASTE.	NUMBER PER MILLE MALES AGED					NUMBER PER MILLE FEMALES AGED				
	0-5	5-12	12-15	15-40	40 and over.	0-5	5-12	12-15	15-40	40 and over.
1	2	3	4	5	6	7	8	9	10	11
Anglo-Indian	135	171	68	432	191	141	101	74	443	151
Babhan	109	155	70	393	238	108	170	62	387	274
Brahman	104	190	73	404	220	106	176	64	404	260
Bhuiya	123	232	82	385	173	133	210	08	403	177
Chamar	123	244	74	365	104	128	213	50	304	206
Chasa	109	231	86	380	165	107	203	71	401	213
European and allied races	69	64	16	503	258	110	102	24	400	202
Gaura	121	223	83	390	178	115	209	08	403	203
Goala	110	217	72	391	210	121	203	58	391	227
Indian Christian	145	235	90	365	153	144	238	91	374	163
Jolaha	134	233	76	353	204	120	203	65	383	220
Karan	95	135	80	406	234	85	108	71	406	209
Kayasth	101	185	63	400	246	111	184	52	380	204
Khandait	106	203	86	395	205	97	183	71	411	238
Kolri	116	205	63	391	220	125	101	55	398	233
Kurmi	113	217	77	391	202	114	204	61	395	226
Munda (Animist)	137	242	91	356	174	141	226	81	379	173
Musahar	127	233	63	370	202	143	213	62	382	195
Orson (Animist)	143	237	96	354	170	143	231	74	363	190
Pan (Hindu)	118	234	84	388	178	118	220	68	413	181
Do. (Animist)	130	224	97	390	180	133	247	68	407	157
Pathan	123	220	73	389	215	121	194	57	397	231
Rajput	99	195	60	408	229	103	185	49	388	273
Santal (Hindu)	121	240	92	390	167	120	227	77	397	170
Do. (Animist)	123	231	89	393	173	133	220	73	395	176
Tanti	115	213	75	384	213	121	185	63	395	231
Teli	117	216	74	395	198	123	198	62	400	217

SUBSIDIARY TABLE IV-A.—PROPORTION OF CHILDREN UNDER 12 AND OF PERSONS OVER 40 TO THOSE AGED 15-40 IN CERTAIN CASTES; ALSO OF MARRIED FEMALES AGED 15-40 PER 100 FEMALES.

CASTE.	PROPORTION OF CHILDREN OF BOTH SEXES PER 100		PROPORTION OF PERSONS OVER 40 PER 100 AGED 15-40		Number of married females aged 15-40 per 100 females of all ages.
	Persons aged 15-40.	Married females aged 15-40.	Males.	Females.	
1	2	3	4	5	6
Anglo-Indian	73	249	44	34	27
Babhan	74	302	60	71	30
Bhuiya	90	225	45	44	31
Brahman	71	189	57	64	31
Chamar	93	108	54	52	34
Chasa	82	198	50	53	31
European and allied races	30	128	43	53	33
Gaura	84	197	46	50	33
Goala	83	196	54	58	33
Indian Christian	103	264	43	44	28
Jolaha	95	203	53	58	33
Karan	86	174	53	66	29
Kayasth	74	201	62	68	30
Khandait	73	179	52	58	31
Kolri	81	169	56	59	34
Kurmi	83	201	52	57	32
Munda (Animist)	101	253	40	49	28
Musahar	96	218	55	51	33
Orson (Animist)	105	245	48	52	30
Pan (Hindu)	88	208	46	44	32
Do. (Animist)	97	254	50	59	29
Pathan	88	201	58	58	31
Rajput	74	208	56	70	29
Santal (Hindu)	91	240	40	43	29
Do. (Animist)	91	231	45	45	31
Tanti	61	182	55	53	33
Teli	82	191	50	54	34

SUBSIDIARY TABLE VI.—VARIATION IN POPULATION AT CERTAIN AGE PERIODS.

NATURAL DIVISION.	Period.	VARIATION PER CENT IN POPULATION (INCREASE +, DECREASE—).					
		All ages.	0-10	10-15	15-40	40-60	60 and over.
1	2	3	4	5	6	7	8
BIHAR AND ORISSA.	1891 to 1901	+ 1.1	— 3.4	+ 1.4	+ 5.2	+ 0.3	— 1.9
	1901 to 1911	+ 8.1	+ 11.5	+ 4.6	+ 8.3	+ 4.8	+ 6.1
	1911 to 1921	— 1.2	— 5.5	+ 4.9	— 0.8	+ 2.8	— 5.5
North Bihar...	1891 to 1901	+ 0.1	— 3.0	+ 3.5	+ 2.7	— 2.5	— 0.9
	1901 to 1911	+ 2.1	+ 4.0	— 2.2	+ 2.3	+ 0.2	+ 2.9
	1911 to 1921	— 0.7	— 3.5	+ 2.3	— 0.1	+ 2.5	— 4.6
South Bihar...	1891 to 1901	— 3.6	— 10.5	— 6.5	+ 2.8	— 4.4	— 4.4
	1901 to 1911	+ 0.7	+ 7.7	— 2.0	— 1.4	— 1.9	— 3.7
	1911 to 1921	— 2.5	— 5.2	+ 2.1	— 4.2	+ 1.9	+ 1.5
Orissa ...	1891 to 1901	+ 7.1	+ 4.5	— 0.5	+ 10.7	+ 10.7	+ 0.8
	1901 to 1911	+ 0.9	+ 1.8	+ 4.4	+ 1.8	— 4.6	— 0.5
	1911 to 1921	— 4.6	— 11.1	+ 2.5	— 4.0	+ 3.2	— 15.0
Chota Nagpur Plateau...	1891 to 1901	+ 5.3	— 0.4	+ 7.3	+ 10.3	+ 7.1	— 2.4
	1901 to 1911	+ 25.6	+ 23.7	+ 17.6	+ 27.9	+ 23.6	+ 27.3
	1911 to 1921	+ 0.4	— 0.1	+ 9.9	+ 1.6	+ 3.8	— 8.3

SUBSIDIARY TABLE VII.—REPORTED BIRTH-RATE BY SEX AND NATURAL DIVISIONS.

YEAR.	NUMBER OF BIRTHS PER 1,000 OF EACH SEX (CENSUS OF 1911).									
	PROVINCE.		NORTH BIHAR.		SOUTH BIHAR.		ORISSA.		CHOTA NAGPUR PLATEAU.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1	2	3	4	5	6	7	8	9	10	11
1911 ...	45	41	44	40	48	44	44	39	43	41
1912 ...	45	41	45	41	48	44	44	38	41	38
1913 ...	44	40	45	40	47	43	44	39	41	38
1914 ...	44	41	43	39	47	43	47	41	43	40
1915 ...	43	39	43	38	46	43	41	36	38	36
1916 ...	39	35	30	34	43	30	36	32	36	34
1917 ...	43	39	44	39	45	41	40	35	39	37
1918 ...	39	36	40	35	43	38	37	32	39	36
1919 ...	32	29	33	29	35	32	35	30	27	25
1920 ...	34	31	36	32	36	33	31	28	30	28
Average of decade ...	41	37	41	37	44	40	40	35	38	35

SUBSIDIARY TABLE VIII.—REPORTED DEATH-RATE BY SEX AND NATURAL DIVISIONS.

YEAR.	NUMBER OF DEATHS PER 1,000 OF EACH SEX (CENSUS OF 1911).									
	PROVINCE.		NORTH BIHAR.		SOUTH BIHAR.		ORISSA.		CHOTA NAGPUR PLATEAU.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1	2	3	4	5	6	7	8	9	10	11
1911 ...	37	33	38	33	46	44	30	26	30	27
1912 ...	33	29	37	32	33	31	34	29	26	23
1913 ...	31	27	35	30	32	30	31	26	24	21
1914 ...	30	27	30	27	32	32	32	28	25	22
1915 ...	34	31	35	31	34	33	40	36	29	25
1916 ...	35	31	37	32	34	32	36	34	31	28
1917 ...	37	34	38	34	43	42	36	33	30	26
1918 ...	59	54	60	53	70	69	48	44	54	49
1919 ...	43	37	38	32	38	35	61	54	46	40
1920 ...	33	29	30	26	36	34	44	40	29	25
Average of decade ...	37	33	38	33	40	38	39	35	32	29

SUBSIDIARY TABLE IX.—REPORTED DEATH-RATE BY SEX AND AGE IN DECADE, AND IN SELECTED YEARS, PER MILLE LIVING AT THE SAME AGE ACCORDING TO THE CENSUS OF 1911.

AGE.	AVERAGE OF DECADE.		1911.		1913.		1915.		1917.		1919.		1920.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
All Ages ...	37	35	37	33	31	27	34	31	37	34	50	54	43	37
Under 1 year ...	235	204	260	221	230	208	243	214	237	203	241	243	204	185
1-5 ...	60	53	62	53	50	43	57	52	64	50	61	61	63	55
5-10 ...	10	17	21	16	15	13	14	11	15	13	15	15	23	13
10-15 ...	15	14	16	15	12	11	12	11	15	14	17	17	13	13
15-20 ...	17	16	16	16	13	11	12	13	17	14	14	12	20	13
20-25 ...	21	15	20	15	16	14	17	15	15	17	42	38	27	21
25-30 ...	24	22	21	20	18	16	21	15	22	20	45	44	22	27
30-35 ...	24	24	25	22	24	15	27	21	24	24	54	46	42	31
35-40 ...	49	41	44	38	37	31	43	37	49	43	75	67	64	52
40-45 ...	84	77	86	71	75	61	91	74	100	82	137	112	115	91

SUBSIDIARY TABLE X.—REPORTED DEATHS FROM CERTAIN DISEASES PER MILLE OF EACH SEX.

BIHAR AND ORISSA.						ACTUAL NUMBER OF DEATHS IN—								
YEAR.	ACTUAL NUMBER OF DEATHS.			RATIO PER MILLE OF EACH SEX.		NORTH BIHAR.		SOUTH BIHAR.		ORISSA.		CHOTA NAGPUR PLATEAU.		
	Persons.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	
1	3	3	4	5	6	7	8	9	10	11	12	13	14	
CHOLERA.	1911	88,583	45,006	43,457	3	3	21,455	20,931	16,265	15,281	4,927	4,549	2,479	2,325
	1912	77,023	30,205	37,818	2	2	25,302	24,829	4,639	4,273	7,229	6,567	2,047	1,839
	1913	70,379	30,632	39,747	2	2	22,729	20,435	6,092	6,089	5,609	5,817	1,621	1,949
	1914	32,115	16,204	15,911	1	1	5,509	5,823	4,207	3,872	4,954	5,068	1,254	1,254
	1915	88,349	44,857	43,492	3	2	19,932	19,191	11,227	10,651	9,700	10,273	3,904	3,273
	1916	90,592	40,350	44,233	3	3	27,940	26,565	5,147	5,168	5,613	5,700	7,729	6,550
	1917	109,620	55,903	53,617	3	3	28,655	27,242	18,489	18,135	4,236	4,355	4,423	3,984
	1918	205,584	105,733	99,851	6	6	66,090	62,283	29,006	27,704	5,439	5,342	5,105	4,521
	1919	104,727	54,740	49,981	3	3	14,753	13,065	4,662	4,181	16,079	15,725	16,201	14,607
1920	26,341	13,469	12,872	1	1	1,542	1,335	2,827	2,718	7,298	7,345	1,862	1,474	
TOTAL	893,303	458,104	435,199	27	25	234,137	221,785	103,008	98,109	74,207	74,414	46,752	40,891	
FEVER.	1911	744,090	385,750	358,334	23	20	175,549	156,505	100,652	97,415	20,786	21,101	68,769	63,213
	1912	644,926	337,313	307,613	20	16	183,113	145,802	74,358	69,140	22,842	23,786	70,000	68,576
	1913	623,556	320,958	299,598	20	17	180,220	140,990	73,016	60,646	21,801	21,157	71,572	64,729
	1914	609,912	315,650	294,262	19	17	145,139	131,369	71,162	70,624	21,615	22,436	77,584	69,733
	1915	696,839	359,749	337,090	21	19	167,500	151,679	75,427	77,048	28,674	28,711	87,048	79,107
	1916	742,833	384,027	358,806	23	20	175,498	155,413	54,700	58,728	25,777	31,401	93,045	87,264
	1917	776,231	398,999	377,232	24	21	175,882	160,012	100,261	99,055	20,697	31,311	98,159	89,061
	1918	1,382,835	706,105	676,730	49	38	261,091	232,896	159,130	192,905	44,157	50,700	168,675	178,909
	1919	970,655	506,331	464,324	30	26	196,543	175,806	108,192	102,839	51,280	53,922	140,217	132,883
1920	762,063	390,364	368,699	24	21	159,279	140,455	98,610	96,044	39,369	41,807	95,370	87,560	
TOTAL	7,953,940	4,118,142	3,835,798	246	217	1,799,890	1,612,801	978,533	958,900	313,888	325,642	1,095,831	938,455	
SMALL-POX.	1911	3,382	1,634	1,698	1	1	1,036	991	242	267	202	177	104	107
	1912	3,357	1,237	1,120	1	1	836	756	119	150	39	80	243	195
	1913	3,935	2,044	1,891	1	1	833	736	710	749	104	72	291	184
	1914	5,778	3,059	2,719	2	2	1,155	1,029	1,133	1,162	596	260	355	328
	1915	15,526	8,318	7,210	5	4	2,464	2,168	2,501	2,246	1,529	1,242	1,825	1,344
	1916	11,874	6,353	5,521	4	3	1,094	1,070	1,409	1,314	1,210	1,006	1,704	1,405
	1917	6,643	3,529	3,114	2	2	1,541	1,350	648	666	625	669	515	437
	1918	6,091	3,192	2,899	2	2	1,156	998	490	473	1,350	1,253	244	179
	1919	10,175	5,797	4,378	3	3	1,365	1,058	731	698	2,677	1,796	1,424	1,078
1920	23,001	12,069	10,932	1	1	2,632	2,195	4,412	4,674	2,644	1,757	3,471	2,368	
TOTAL	88,762	47,620	41,142	31	29	15,002	12,987	12,467	11,801	9,785	8,336	10,366	7,958	
PLAGUE.	1911	73,829	31,055	42,164	2	2	11,557	15,210	20,684	28,931	1	4	23	19
	1912	58,324	25,109	33,215	1	2	11,609	15,451	12,427	17,701	1	1	72	61
	1913	36,393	15,617	20,776	1	1	6,837	8,673	9,173	12,635	...	...	57	58
	1914	64,334	27,041	37,293	2	2	12,731	17,438	14,282	19,799	...	...	22	27
	1915	27,241	11,703	15,539	1	1	4,532	5,093	7,120	9,569	...	...	43	67
	1916	25,349	10,795	14,551	1	1	4,061	5,651	6,785	8,507	...	...	2	2
	1917	45,436	19,440	25,996	1	1	7,070	9,419	12,342	16,522	...	...	24	40
	1918	53,832	23,117	30,415	1	2	8,260	10,877	14,760	18,275	...	...	149	180
	1919	16,601	7,215	9,386	4	5	4,010	5,266	3,173	4,672	...	...	32	27
1920	19,168	8,201	10,967	5	1	3,982	4,949	4,263	5,569	...	...	46	53	
TOTAL	420,137	180,011	240,126	109	135	74,185	98,977	105,344	140,604	9	14	473	531	

CHAPTER VI.

SEX.

The distinction of sex is maintained in all the census tables, but for the purpose of this chapter the most important are Table VII, in which sex statistics are combined with those for age, religion and civil condition, and, for individual castes and tribes, Table XIV. The following proportional tables will be found at the end of the chapter :—

Subsidiary Table I.—General proportions of the sexes by Natural Divisions and districts.

Subsidiary Table II.—Number of females per 1,000 males at different age-periods by religions at each of the last four censuses.

Subsidiary Table III.—Number of females per 1,000 males at different age-periods by religions and Natural Divisions.

Subsidiary Table IV.—Actual number of births and deaths reported for each sex during the decades 1891—1900, 1901—1910 and 1911—1920.

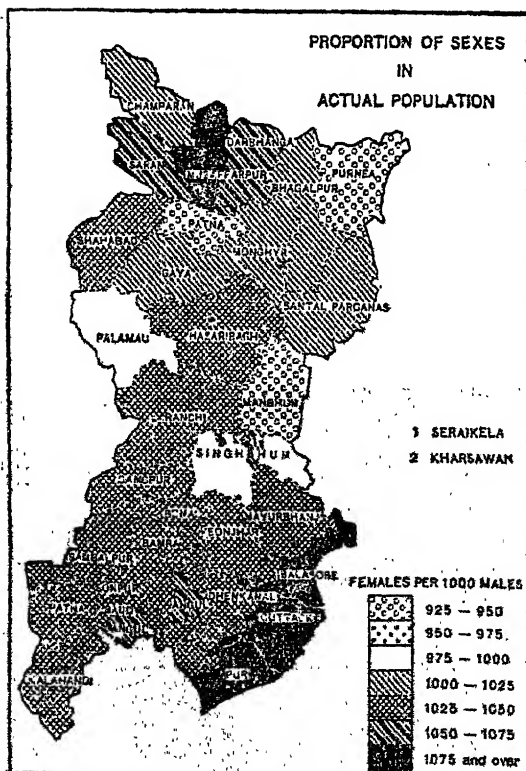
Subsidiary Table V.—Number of deaths of each sex at different ages.

Subsidiary Table VI.—Number of females per 1,000 males for certain selected castes.

2. The proportion of females to males varies considerably in different countries as the following figures show :—

PROPORTION OF SEXES.				
England and Wales*	...	...	...	1,068
France	...	...	...	1,034
Japan	...	...	...	979
United States	...	...	...	943
Australia	...	...	...	926
Canada	...	...	...	886

In India in 1911 the number of females to every 1,000 males was 953; on the present occasion it has sunk to 947. But in the province of Bihar and Orissa, as in Madras and the Central Provinces which adjoin it, there is an excess of females : the figures are 19,251,806 females and 18,710,052 males or 1,029 females to every 1,000 males. The proportion of females to males in the actual population of each district is shown in Subsidiary Table I and illustrated in the marginal map.



* The figures are taken from the Report on the Census of England and Wales, 1911. The proportion of females per 1,000 males in England and Wales at the last census (1921) had risen to 1,095, but as the figures for 1921 for the other countries were not available the 1911 figures have been given for England and Wales also for purposes of comparison.

The same facts are exhibited in a slightly different way in the following diagram in which are shown the proportions of males and females in every 1,000 of the actual population of each district, the districts being arranged in order of masculinity.

PROPORTION OF SEXES IN ACTUAL POPULATION OF DISTRICTS.					
MALES PER 1000 PERSONS	200	400	600	800	FEMALES PER 1000 PERSONS
MANBHUM	516				484
PURNEA	515				485
PATNA	513				487
PALAMAU	501				499
SINGBHUM	500				500
JAYA	499				501
CHAMPARAN	499				501
BHAGALPUR	499				501
S. PARGANAS	499				501
MONGHYR	495				505
RANCHI	494				506
SHAHABAD	493				507
ORISSA STATES	492				508
SAHIBPUR	491				509
HAZARIBAGH	489				511
DARBHANGA	488				512
C. N. STATES	487				513
ANGUL	486				514
SARAN	484				516
MUZAFFARPUR	481				519
PURI	479				521
BALASORE	475				525
CUTTACK	461				539

3. There has always been an excess of females in the population of this province. In 1872 the number of females per 1,000 males was 1,009. From that date there was a progressive increase in the proportion of females till 1901 when the figure of 1,047 was reached. In 1911 the figure fell to 1,043 and at the present census to 1,029. A corresponding rise and decline in the proportion of females can be traced in the history of each Natural Division, the only exceptions being South Bihar, where heavy mortality from plague in the last twenty years, to which females are more liable than males, caused the proportion to start declining from 1891 instead of from 1901 until it has finally been reduced from having the highest to having the lowest proportion of females in the province, and Orissa, where the proportion of females has from the first been steadily increasing owing to the gradual increase of emigration amongst the males. The drop in the female population of the province is the outstanding feature of the last decade, the loss of females (368,051) amounting to more than three times the loss of males (104,844).

4. It must be admitted that the record of births and deaths during the last decade gives little or no assistance in explaining this fact. In Orissa the vital statistics showed a natural decrease in the female population during the last decade of 3,500 and a natural increase of 13,500 males. Migration also caused a loss as compared with 1911 of 86,000 males and 39,000 females. These two factors together explain about half the actual loss in the case of the male sex which amounted to 138,152 and the greater part of the loss of 53,124 females. Elsewhere it is impossible to trace any connexion. In North Bihar for instance there has been according to the vital statistics a natural increase during the decade of 225,000 males and 280,000 females, the female increase being greater than the male in every district except Saran: yet the census showed an increase of only 50,810 males and a loss of 145,180 females. The difference between the actual population of North Bihar in 1911 plus the natural increase of the decade on the one hand and the actual population of 1921 on the other is 599,000 as compared with a corresponding difference for the previous decade of 430,000. It is idle to hope to reconcile the two sets of figures, but a few suggestions may be made. The vital statistics experiment in Muzaffarpur district showed a steady decrease year by year in the population, decidedly more marked in the case of females than of males,

in an area selected on account of its being typical. Reduced emigration also explains part of the increase in the male population: but migration only makes the decrease of females more striking, for North Bihar gained 23,000 females under this head as compared with 1911. Similarly in South Bihar, in spite of a reported natural increase of 138,000 males and 78,000 females and a net increase from migration since 1911 of 23,000 males and 21,000 females there has been an actual decrease of 35,989 males and 157,690 females. It is true that here the lower rate of natural increase amongst the female sex helps to explain the greater loss of female population, but the fact remains that the vital statistics taken by themselves would lead one to expect an actual increase of population. In the Chota Nagpur Plateau the vital statistics of every district except Angul show a natural increase, more marked in the case of the female than of the male sex: in the case of Angul, for which statistics are only available since 1914, there has been a loss, but the loss is more marked in the case of the males. Everything therefore pointed to the fact that the female sex would have a larger increase or at any rate a smaller decrease to show at the 1921 census than the male sex. Actually there was a gain of 27,426 males and a loss of 35,506 females. Migration cannot explain the great difference between the sexes, for as compared with 1911 the division lost 12,000 males to 14,000 females, a difference of 2,000 only. Nor is it reasonable to ascribe this widespread and wholesale decrease of females to slack enumeration: a slack enumerator, though he might tend to omit females rather than males, would not omit 3 females to every male. The vital statistics in Orissa bear a closer relation to the census figures than they do elsewhere; it was in Orissa that the influenza epidemic caused least damage, and this fact is significant. The provincial death-rate from fever in 1918 was indeed rather lower amongst females than amongst males, the difference amounting to 3·6 per mille, but on the other hand the number of female deaths from all causes in proportion to the number of male deaths was markedly higher than in any other year of the decade. The powers of diagnosis of the village *chaukidar* being what they are it is suggestive that this ratio was high in a year of which the conspicuous feature was the influenza epidemic. It becomes more so when it is found that the ratio was high (in practically every case the highest of the decade) in all other provinces except in Bengal where the influenza was least severe. In other provinces in fact definite statistics are available to prove that influenza was more fatal to females than to males. There is no doubt that during this epidemic the reporting agency was disorganized and many deaths went unreported. According to evidence actually collected in other provinces and the general impression of several medical officers of this province who were consulted, the influenza was fatal to females rather than to males and, if so, a higher proportion of female deaths would go unreported. In Bihar plague also must be considered, not indeed as explaining the discrepancy between the vital statistics and the census figures, but as explaining the heavier loss of female life. Of the 420,000 persons reported to have died of plague in the last ten years in this province 240,000 or 57 per cent. were females. The greater liability of women to this disease is well recognized: their habits expose them much more to the attacks of the rat flea than do those of the men: they live less in the open air, they go bare-footed, they sweep the floors and handle the grain, they nurse the sick and assemble round corpses for the purposes of mourning just at the time when there is the greatest risk of infection. Wherever therefore there is plague there is likely to be heavy female mortality. This was one of the most important factors in the reduction of the proportion of females in North and South Bihar in 1911, for plague had been very prevalent in the preceding ten years. In the last ten years plague has been less destructive of life and though it has no doubt contributed and should be mentioned, it has played a comparatively minor part in reducing the proportion of females. Finally it must be remembered that there were reasons why the scarcity of the last few years should not operate in favour of the female sex as much as usual. It has been proved on previous occasions that scarcity and famine differentiate against the male

and in favour of the female sex, the reason commonly given being that the women who prepare the family meals get the pickings. The scarcity of 1919 was met by an enormously increased emigration and did not lead to deaths by starvation, so that there was less occasion than formerly for the men to be taken and the women left.

5. More boys are always born than girls. What it is that determines the sex of children is still a mystery, though the results of recent experiments suggest that light may soon be thrown upon it.

SEX PROPORTIONS AT BIRTH.

According to the vital statistics of this province 950 girls were born for every 1,000 boys on the average during the last ten years: in the first half of the decade the figure was 955, but in the second half it fell to 946. The drop began in 1915 in the second year of the war. In the belligerent and in several of the non-belligerent countries of Europe it has been proved that the degree of masculinity increased noticeably during the war, and various theories have been advanced to account for this fact though none have yet been proved. It is interesting to find the same phenomenon in Bihar and Orissa where it cannot be supposed that the war had any direct effect on the birth-rate. The appendix to this chapter shows the results of correlating sex constitution with size in the case of 12,593 families included in a special enquiry. For families of all sizes investigated 87.5 girls were born for every 100 boys: in the case of families consisting of one child only the female proportion sank to 63.8, but the facts recorded, although they do not conflict with the theory that the proportion of female children increases with the size of the family, do not give it any special support. So far as the first born is concerned the proportion of females to males was found to be 76.5 per cent. It is difficult to suppose that these figures do not exaggerate the proportion of male births: a much extended enquiry would be necessary in order to put them on an established basis, but there is no reason to doubt the fact that the proportion of males is higher amongst the first born than amongst all children born, this being in accordance with the general experience of other countries.

6. It is commonly supposed that race is one of the most important factors in determining the proportion of the sexes at birth. The clearest racial line in this province is that which separates the aboriginal races of the Chota Nagpur Plateau from Bihar on the one side and Orissa on the other. In the margin are given the number of female births per mille of

	Proportion of female per 1,000 male births.	
	1911-1920.	1901-1911.
North Bihar ...	944	952
South Bihar ...	951	954
Orissa ...	948	951
Chota Nagpur Plateau.	953	962

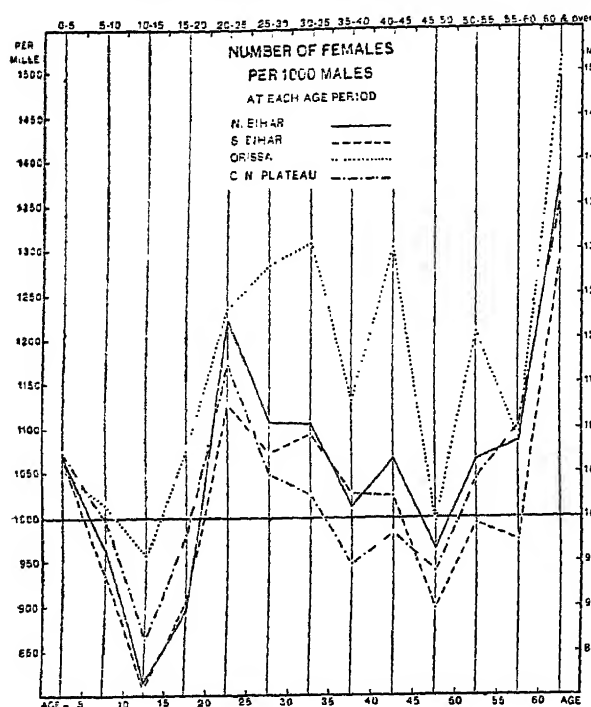
male births in each Natural Division during the last two decades. It will be seen that on each occasion the proportion of female births is noticeably higher in the Chota Nagpur Plateau, a fact corroborated by the higher proportion of females to males in this Natural Division at the age 0-1 which is noticeable at both of the last two censuses, although it is not discernible in the age period 0-5. Amongst the aboriginal races generally therefore it would appear that the proportion of males born is lower than amongst the peoples of Bihar and Orissa proper. Statistics are not available to pursue this subject further into the region of particular castes and tribes.

7. The higher proportion of males at birth is soon lost, as is shown by the following diagram which illustrates the figures in Subsidiary Table III.

PROPORTION OF SEXES AT DIFFERENT AGES.

During the last decade the vital statistics show that the male death-rate at the age 0-1 was 3.1 per cent. higher than the female death-rate. As this mortality begins immediately after birth it is natural that the census returns should show a higher female proportion amongst children in their first year of life than in the case of children born: this is indeed so much so that the females actually predominate amongst infants in the first year of

life in the proportion of 1,006 to 1,000. This predominance continues for the

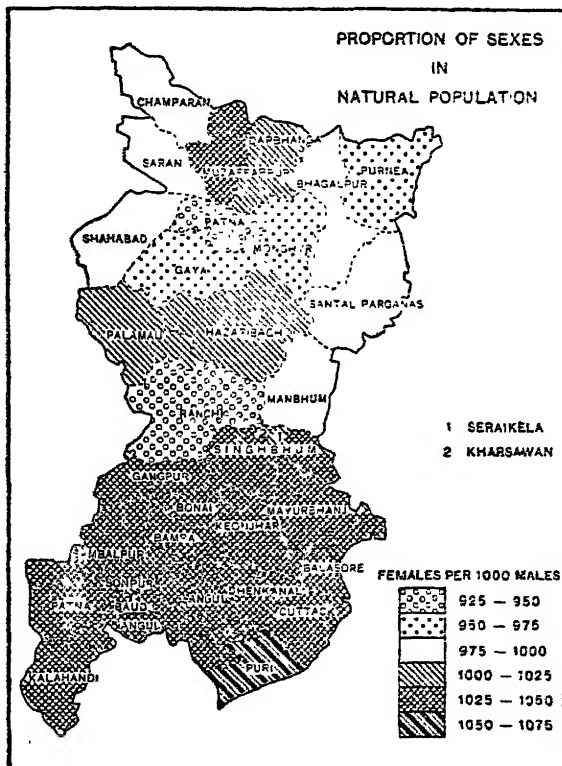


first five years of life. At the age period 5-10 males are in excess for every main religion: this excess is more marked in the age period 10-15 particularly in the case of the Muhammadans and it is still found, except in the case of Animists, at the age 15-20. It is the general experience of other countries also that the male is lower than the female death-rate in childhood, i.e. from 5 to 15, and that as regards deaths from natural causes this advantage remains at least up to early middle age. The great depletion of females in this province at the age period 10-15 is probably owing to the fact that immature girl wives amongst whom

the death-rate is high are included in this period, and this factor probably affects also the age period 15-20 to some extent, though the reduced female proportion in this period is due also to deliberate mis-statements of the age of females, parents being unwilling to admit that their unmarried daughters have reached that age without being married. From that point the proportion of females continues to be higher than that of males at all ages till the end except in the case of Animists at the age 40-50. In this age period all religions show a lower proportion of females than in the periods that precede and follow it, and the same deficiency was found ten years ago amongst the Muhammadans and Animists. If the deficiency of ten years ago was a permanent scar in that age period it should appear on this occasion in the group 50-60, but it does not. The more probable explanation is that 50 is an age less favoured by females than males: it is the age at which the expectation of bearing children has ceased and it is not sufficiently advanced to command that respect which is given to old age.

8. The effect produced by the dangers of maternity especially of premature maternity on the proportion of the female sex at the child-bearing ages is also shown by the actuarial calculations based on the last census. The death-rate per cent. calculated for Bengal (which included Bihar and Orissa) on the results of the 1911 census is shown in the diagram already reproduced at page 152. The rapid drop in the line from just below 30 at age 0 to 2.97 at age 5 and to its minimum of 1.36 at age 11 shows how heavy the infant mortality is and how rapidly the chances of life improve during the first ten years. After the age of 11 the chances of death rise steadily year by year till the age of 70 after which they increase more and more rapidly. Only the male line is plotted because if the female line was plotted also it would be practically indistinguishable from it in a diagram of this size. It would however start below the male line at age 0, (male rate, 29.86; female rate 29.76): at age 9 it would rise above the male line (male rate 1.53; female rate 1.54) and remain there till age 33 when the male line would cross it again (male rate 2.57; female rate 2.55) towards the end of the reproductive age: from that point the male line would remain above the female line till the end. The female line would rise highest above the male line from 17 to 20 when the difference of the calculated death-rates is 0.1 per cent. No separate calculation is available for Bihar and Orissa but a comparison of Subsidiary Table VI for the last two censuses with that of Bengal suggests that the excess of the female death-rate over the male

death-rate from 17 to 20 occurs rather in Bengal than in this province: in this province the excess appears to be less marked and to occur after the age of twenty, supporting the theory that premature motherhood is a cause of less mortality than in Bengal. Also the female death-rate after the age of 50 is much higher than in Bengal and in excess of the male rate after the age of 60 in both decades..



9. The wholesale emigration that takes place from Bihar and Orissa to other parts of India particularly to Bengal obscures the true proportions of the sexes, because the number of male emigrants is much greater than the number of female emigrants. In order to show the extent to which this is the case the proportion of females in the natural population of each district, *i.e.* the population born in that district wherever enumerated, is printed in Subsidiary Table I alongside the figure for the actual population. The sex proportions in the natural population are illustrated in the marginal map.

10. A comparison of this map with the preceding one at once makes it clear that migration makes a great deal of difference to the sex proportions. In the actual population there is an excess of males in five districts only, Purnea, Patna, Manbhum, Palamau and Singhbhum, but, when the natural population is considered, the males are found to be in excess in eleven districts, though in 1911 the figure was only three. Patna is the most outstanding case of a district with an excess of males: in the actual population there are only 949 females per thousand males and in the natural population 930 only. The proportion of females has been steadily declining, chiefly as the result of the plague. Purnea also shows a high proportion of males: as regards the actual population this can readily be explained, for Purnea is a district that is largely inhabited by immigrants and immigrants are more often males than females. But immigration will not account for the great excess in the natural population; the cause of this is to be sought in the fact that Purnea is adjacent and its population akin to that of districts of Bengal, Dinajpur and Jalpaiguri, in which apparently for some racial reason the proportion of males is still higher. In Manbhum the proportions of the sexes in the natural population are about equal: but the immigrant labour in the coal-field turns the scale heavily in favour of the males in the actual population. In Singhbhum also Jamshedpur and the various other industrial undertakings have for the first time a marked effect in reducing the proportion of females in the actual population though in the natural population the proportion of females is higher than it was before. In Palamau the low proportion of females in the actual population is accounted for by the emigration of females to the contiguous districts of this province and of the United Provinces, Palamau being apparently a popular district from which to select a wife: in the natural population the sexes are almost exactly equal.

11. Elsewhere in the province the effect of migration is in the opposite direction: the proportion of females is higher in the actual than in the natural

population and this feature is most marked in the districts where the habit of temporary migration is strongest, for the greatest difference between the proportion of females in the actual and natural population occurs in Cuttack (119 per mille), Saran (90 per mille) and Ranchi (77 per mille). On the other hand the difference is less (only 15 per mille) in the Santal Parganas where emigration is on a very large scale because the type of emigration is different; the emigrants set out to make new homes for themselves and take their women-folk with them. When the effects of migration are allowed for, it is found that the two districts which have the lowest proportion of females per 1,000 males in the natural population are Patna (930) and Ranchi (949).

12. In point of natural as well as actual population Orissa has the highest proportion of females and South Bihar the lowest: indeed the proportion of

SEX PROPORTIONS BY NATURAL
DIVISIONS AND RELIGION.

females in both cases has actually increased in Orissa in the last ten years whereas elsewhere it has universally decreased: this is owing chiefly to increased emigration of males but partly also to the fact that Orissa has suffered more from scarcity, which tends to differentiate against males, than disease which tends to differentiate against females. Orissa has the highest proportion of Hindus in the province, but this fact cannot explain the broad differences in the sex proportions because in Orissa, as well as in Bihar, the proportion of females is higher amongst the Muhammadans. In Chota Nagpur the Muhammadans have the lowest proportion of females and the Animists the highest. As between one Natural Division and another therefore the sex variations cannot be explained on a basis of religion. Within the Natural Divisions however religion does appear to exert an influence of secondary importance. If the Chota Nagpur Plateau be neglected, where a large part of the Hindu population is akin to the Animist population with its high proportion of females and where the sex proportion is distributed by the immigration of male labourers into Manbhum and Singhbhum, it will be found that the proportion of females is higher amongst Muhammadans than amongst Hindus. But in none of these three Natural Divisions separately considered does the religious line of cleavage coincide with any racial line, so that there is a presumption that what difference there is is due to difference of social practice enjoined or permitted by religion. The fact that Hindus desire sons rather than daughters is undoubted and in time past legislation was necessary to stop the practice of female infanticide. There is nothing to show that deliberate female infanticide obtains to any extent in the province now-a-days, in fact it is probably quite safe to say that it produces no effect upon the sex proportions. But there are various degrees of attention with which children can be reared and when it comes to choosing between a boy and a girl it may well be that the former gets the preferential treatment that gives the better chance of survival. This would appear to be one explanation of the difference between the Hindu and Muhammadan proportions; it does not however count for very much for the proportion of females per 1,000 males aged 0-5 is only 4 less amongst Hindus than amongst Muhammadans (1,069 against 1,073). The difference is more marked at the reproductive ages. That many Hindu girl wives perish in the early years of married life is shown by the fact that although the proportion of Hindu females is higher at the ages 5-10 and 10-15, by the time the middle age periods are reached (15-40) the predominance of the Muhammadan proportion is firmly established. This continues till the last age periods (50-60 and 60 and over) when, thanks to the tenacity with which the Hindu widow clings to life, the Hindu proportion again forges ahead.

13. Amongst the Animists the higher proportion of females that occurs at birth is lost by the third year of age owing presumably to high mortality amongst female infants; for the age group 0-5 the sex proportions exactly tally with those of the Hindus and the general population. From 10 to 20 years of age the Animist proportion of females is particularly high, being much above those of the other main religions and the general population owing to the fact that amongst the aboriginals child-bearing does not begin so early.

14 The proportions of the sexes in some of the most important castes and tribes are given in Subsidiary Table VI. The proportion of females is lowest (632 per 1,000 males) in the case of the European and allied races; from the age of 20 onwards there are nearly two European males to every European female, many of the males being unmarried and many having left their wives and families in Europe. Next come the Anglo-Indians amongst whom there are 913 females to every 1,000 males. Amongst the Hindu castes the Rajputs have the lowest proportion of females (947 per 1,000 males), then come the Kayasths (948), the Babhans or Bhumihar Brahmans (949), the Goalas (984) and the Brahmans (989). Generally speaking therefore the highest castes appear to have the highest degree of masculinity which is probably accounted for in part by the fact that the males of these castes emigrate less than those of the lower castes. The castes in which the proportion of females is highest are the Khandaits (1,154 per 1,000 males), the Chamars (1,127), the Telis (1,121) and the Karans (1,120). It is worthy of notice that in the case of the Pans and the Santals, in whose case figures are given separately for Hindus and Animists, the proportion of males is higher in each case amongst the Animists than amongst the Hindus, the Animists representing the stay-at-home part of the tribe which is not given to migration.

APPENDIX TO CHAPTER VI.

SIZE AND SEX CONSTITUTION OF FAMILIES.

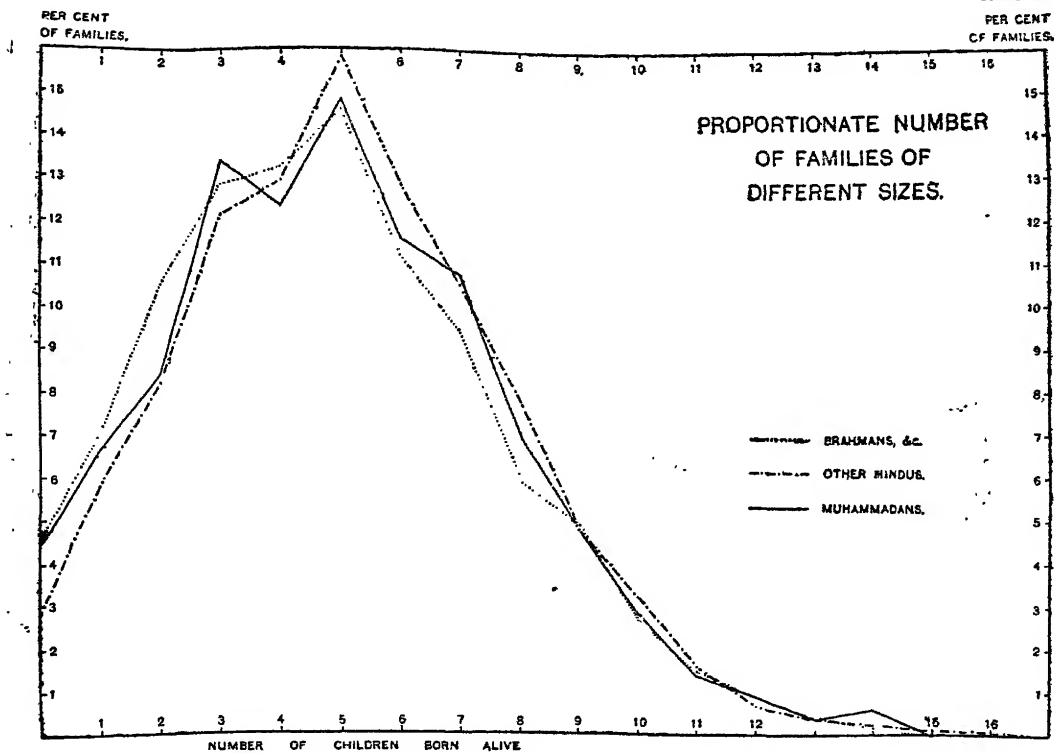
In order to obtain information regarding the size and sex constitution of families in this province a special, separate enquiry was set on foot at the time of the census. Thanks to the good offices of the Inspector-General of Civil Hospitals the enquiry was conducted through medical officers in different parts of the province, they being selected as being the persons best qualified to record accurate information. Booklets were distributed to these officers each containing a hundred slips and each slip was arranged so as to show for a single family, the district, the caste, tribe or race, the present ages of the husband and wife, the duration of married life from effective marriage (a phrase that was intended to signify the beginning of cohabitation but was unfortunately misunderstood in a number of cases), the number of children of each sex born alive and still alive, and the sex of the first-born. The recording officer was asked to confine his enquiries to cases where the husband had had only one wife who had been living with him from the date of their effective marriage and who was still alive. He was also asked to select a good proportion of cases in which the wife was over 45 years old, *i. e.* had passed the reproductive age, so that information would be available with regard to completed families. The slips when received were divided into four groups, the first containing Brahmans, Bhumi-har Brahmans, Rajputs, Kayasths, Karans, and Khandaits (*i. e.* the most educated Hindu castes), the second Other Hindus, the third Muhammadans, and the fourth Others. In all 12,593 slips were received, 3,101 relating to Brahmans, etc., 7,111 to Other Hindus, 2,093 to Muhammadans and 288 to Others. The fourth group included slips relating to Indian Christians and Animists: the widely divergent classes of person included in it and the small number of slips deprive the conclusions relating to it of any great significance.

A.—SIZE OF FAMILIES.

2. The following table shows the actual and proportionate number of families of different sizes (*i. e.* according to the number of children born alive) by groups:—

SIZE OF FAMILY.	All Groups.		Brahmans, etc.		Other Hindus.		Muhammadans.		Others.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
0	446	3·5	143	4·6	202	2·8	92	4·4	9	3·1
1	801	6·4	219	7·1	423	5·9	141	6·7	18	6·5
2	1,104	8·8	226	10·5	580	8·2	176	8·4	22	7·6
3	1,613	12·4	366	12·8	862	12·1	278	13·3	26	9·0
4	1,562	12·8	410	13·2	919	12·9	257	12·3	32	11·1
5	1,927	15·3	452	14·6	1,120	15·8	309	14·8	46	16·0
6	1,586	12·2	347	11·2	908	12·8	243	11·0	37	12·8
7	1,294	10·3	293	9·4	746	10·5	224	10·7	31	9·0
8	897	7·1	182	5·9	545	7·7	144	6·9	26	10·8
9	610	4·8	152	4·9	342	4·8	100	4·8	16	5·6
10	384	3·1	84	2·7	230	3·2	59	2·8	11	3·8
11	192	1·5	46	1·5	111	1·6	29	1·4	6	2·1
12	108	·8	28	0·9	51	0·7	19	0·9	5	1·7
13	52	·4	12	0·4	31	0·4	8	0·4	1	0·3
14	39	·3	7	0·2	19	0·3	12	0·6	1	0·3
15	7	·1	1	...	5	0·1	1	...	...	...
16	10	·1	2	0·1	8	0·1	...	...	...	...
17	4	·1	...	...	2	...	1	...	1	0·3
18	3	...	...	...	3	0·1	...	...	...	...
19	1	...	...	...	1	...	...	...	...	...
20	1	...	...	...	1	...	...	...	...	...
21	2	...	1	...	1	...	...	...	...	...
22	1	...	...	...	1	...	...	...	...	...
Families of all sizes ...	12,593	100	3,101	100	7,111	100	2,093	100	288	100

The figures are illustrated in the following diagram; the figures for Others, which on the whole show a lower percentage of small families and a higher percentage of large families than do the other three groups, have been omitted for the sake of clearness.



There is really little to distinguish one group from another: the most common size of family in every case is that of five children born alive; the average size is 5.1. Brahmans, etc., and Muhammadans both show a higher percentage of childless families and also of families containing one, two or three children than do Other Hindus.

3. It was intended to correlate size of family with duration of marriage and to give a table showing the average number of children born alive, still alive and since deceased according to the duration of married life; but owing to the misunderstanding of the words "effective marriage" on the part of the recording staff the parents were in many cases shown as having contracted "effective marriage" at the ages of 1, 2, and 3 which is obviously impossible. The phrase "duration of married life" was therefore used in two different senses and a table prepared on the fallacious supposition that it was always used in the same sense could only be misleading. It was therefore decided not to follow up this line of enquiry.

4. The percentage of children dying (not necessarily in infancy) to the children born alive in the different groups is as follows:—

	All Groups.	Brahmans, etc.	Other Hindus.	Muham- madans.	Others.
Males	31.6	29.2	32.5	32.4	28.5
Females	33.1	31.4	34.0	32.8	27.7
Both sexes...	32.3	30.2	33.2	32.6	28.2

It is difficult at first sight to reconcile the higher female death-rate and higher male birth-rate with the fact that females are in excess in the population. The higher male birth-rate is an undoubted fact and the explanation of the higher female death-rate probably is that it reflects the loss of female population in the last ten years. The greater part of the casualties mentioned above must have occurred in those years and during that period the excess of females in the population has sunk from 1,034 to 1,029 to every 1,000 males.

B.—AGE OF PARENTS AT MARRIAGE.

5. The information available on the subject of the age of parents at marriage is shown in the following table. It should perhaps be explained that the “mode” is the point of greatest frequency, *i.e.* in this case the age at which more parents of each sex were married than at any other, while the “median” is the middle point between the highest and lowest points on a scale, *i.e.* in this case the age which lies midway between the highest and lowest ages at which any parent of that sex was married :—

	All Groups.		Brahmans, etc.		Other Hindus.		Muhammadans.		Others.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Average age	21.2	13.2	21.7	13.2	20.5	12.8	22.5	14.0	24.1	16.6
Mode	20	15	20	15	20	15	20	15	20	15
Lowest age	2	1	2	1	3	1	4	2	7	2
Highest age	57	49	47	32	55	45	50	42	57	49
Median	29—30	24	24—25	16—17	29	23	27	20	25	25—26

Here again the misunderstanding with regard to the term “effective marriage” must be discounted. The lowest ages have only been shown in the table for that purpose, for it is clear that no effective marriage could be contracted between the ages of 1 and 7. Some interest attaches to the highest age at which marriages are contracted, but the most important figure is the mode. The regularity with which most husbands of all religions marry at the age of twenty and most wives at the age of 15 is interesting. These figures were not directly entered in the slips and but were arrived at by deducting the duration of married life from the present ages of the parents: it is probable however that the prevailing uncertainty with regard to age and preference for figures ending with 0 and 5 have helped to produce the extreme regularity of the results.

C.—SEX CONSTITUTION OF FAMILIES.

6. The following table shows the percentage of female to male children born alive by groups according to size of family :—

SIZE OF FAMILY.					NUMBER OF FEMALE CHILDREN PER CENT. OF MALE CHILDREN (BORN ALIVE).				
					Total.	Brahmans.	Other Hindus.	Muhamma- dams.	Others.
1	...	...	...	...	63.8	67.2	59.6	71.95	63.6
2	...	...	...	...	80.8	83.1	78.2	86.24	76.0
3	...	...	...	...	81.6	82.5	79.1	85.33	122.9
4	...	...	...	...	90.5	85.9	93.9	89.66	66.2
5	...	...	...	...	88.3	92.2	87.5	86.82	81.1
6	...	...	...	...	88.0	86.2	89.0	85.97	93.0
7	...	...	...	...	91.1	94.4	90.1	89.83	95.5
8	...	...	...	...	86.9	86.2	85.1	95.58	84.1
9	...	...	...	...	87.5	90.3	83.5	94.38	108.7
10	...	...	...	...	86.6	85.8	85.3	93.44	86.4
11	...	...	...	...	85.9	94.6	82.0	91.01	73.7
12	...	...	...	...	79.1	75.9	80.5	80.95	76.5
13	...	...	...	...	76.0	97.5	67.2	96.23	18.2
14	...	...	...	...	96.4	133.3	74.2	84.61	75.0
15	...	...	...	...	98.1	66.7	144.3	66.66	.....
16	...	...	...	...	220.0	60.0	326.7	.....	.....
17	...	...	...	...	172.0	.....	277.8	112.5	112.5
18	...	...	...	...	86.2	.....	86.2	.....	.....
19	...	...	...	...	171.4	.....	171.4	.....	.....
20	...	...	...	...	233.3	.....	233.3	.....	.....
21	...	...	...	...	100.00	90.9	110.0	.....	.....
22	...	...	...	...	144.4	.....	144.4	.....	.....
All families	...	...	...	...	87.5	88.1	86.7	89.1	86.6

7. A somewhat similar enquiry which was conducted in connexion with the last census in the Central Provinces revealed a distinct tendency for the proportion of female children to increase with the size of the family. Although there is nothing in the above figures that conflicts with that hypothesis, they do not appear to furnish any further evidence in support

of it. What they do show is that the number of female children born is always less than the number of male children born and that, in the case of families consisting of one child only, this tendency becomes very marked. The families consisting of more than 12 children are insufficiently numerous for reliable conclusions to be drawn from them.

D.—SEX OF THE FIRST-BORN.

8. The following statement shows the percentage of female to male first-born children. The chances are always in favour of a male child and in the case of a first-born the chances become even stronger. According to these figures the chances of any child being born a male are 114 to 100; but the chances in favour of a first-born child being a male are 131 to 100. If Others be neglected, the chances of a male first-born are highest in the case of the Muhammadan and lowest in the case of the Brahman group.

SIZE OF FAMILY.					NUMBER OF FEMALE FIRST-BORN PER CENT. OF MALE FIRST-BORN.				
					All Religions	Brahmans.	Other Hindus.	Muhammads.	Christians, etc.
1	...	...	...	...	63·5	67·2	59·6	69·9	63·6
2	...	...	...	...	69·3	63·9	70·1	69·2	57·1
3	...	...	...	...	76·1	73·7	77·0	77·1	73·3
4	...	...	...	...	88·4	81·4	86·0	110·7	82·2
5	...	...	...	...	76·6	87·9	77·8	62·6	48·4
6	...	...	...	...	75·5	90·7	73·3	67·6	58·3
7	...	...	...	...	75·3	86·6	70·7	76·4	82·4
8	...	...	...	...	81·9	93·6	80·5	75·6	73·3
9	...	...	...	...	76·3	87·7	78·1	51·5	123·6
10	...	...	...	...	74·2	95·3	70·3	73·5	37·5
11	...	...	...	...	77·7	84·0	69·9	93·3	100·0
12	...	...	...	...	80·7	47·4	96·2	90·0	150·0
13	...	...	...	...	13·3	100·0	72·2	60·0	.....
14	...	...	...	...	95·0	133·3	90·0	100·0	.....
15	...	...	...	...	75·0	(a)	150·0	(a)	.....
16	...	...	...	...	66·6	(b)	100·0	.....	.....
17	...	...	...	...	300·0	.....	100·0	(c)	(c)
18	...	...	...	...	.....	.....	.....	.....	.....
19	...	...	...	...	.....	.....	.....	.....	.....
20	...	...	...	...	.....	.....	.....	.....	.....
21	...	...	...	...	.....	.....	.....	.....	.....
22	...	...	...	...	.....	.....	.....	.....	.....
TOTAL					76·5	81·3	75·4	74·5	68·6

(a) 1 Brahman and 1 Muhammadan first-born both males.

(b) 2 Brahman first-born both males.

(c) 1 Muhammadan and 1 Christian first-born both females.

SUBSIDIARY TABLE I.—GENERAL PROPORTIONS OF THE SEXES BY NATURAL DIVISIONS AND DISTRICTS.

DISTRICT AND NATURAL DIVISION.	NUMBER OF FEMALES TO 1,000 MALES.										
	1921.		1911.		1901.		1891.		1881.		1871.
	Actual Population.	Natural Population.	Actual Population.	Natural Population.	Actual Population.	Natural Population.	Actual Population.	Natural Population.	Actual Population.	Natural Population.	Actual Population.
1	2	3	4	5	6	7	8	9	10	11	12
BIHAR AND ORISSA ...	1,029	999	1,043	1,014	1,047	1,037	1,040	1,033	1,024	1,018	1,009
NORTH BIHAR ...	1,029	996	1,053	1,019	1,064	1,038	1,049	1,030	1,026	1,015	999
Saran ...	1,066	976	1,151	1,012	1,200	1,074	1,178	1,077	1,105	1,023	1,070
Champaran ...	1,004	960	1,036	1,022	1,023	1,030	988	1,023	977	990	954
Muzaffarpur ...	1,079	1,025	1,062	1,043	1,089	1,055	1,071	1,025	1,040	1,023	1,024
Darbhanga ...	1,051	1,013	1,074	1,039	1,068	1,036	1,044	1,034	1,032	1,020	973
Bhagalpur ...	1,005	996	1,023	1,016	1,033	1,033	1,023	1,021	1,008	1,013	991
Purnea ...	841	857	857	990	958	983	953	978	973	987	957
SOUTH BIHAR ...	1,002	962	1,034	991	1,050	1,020	1,059	1,041	1,043	1,027	1,043
Patna ...	949	930	988	951	1,020	991	1,043	1,015	1,045	1,029	1,047
Gaya ...	1,003	964	1,035	983	1,037	1,009	1,045	1,026	1,038	1,025	1,043
Shahabai ...	1,030	978	1,063	1,010	1,066	1,054	1,082	1,126	1,068	1,023	1,064
Monghyr ...	1,019	971	1,044	1,008	1,045	1,024	1,063	1,023	1,033	1,023	1,021
ORISSA ...	1,133	1,047	1,081	1,023	1,055	1,020	1,044	1,031	1,032	1,018	1,031
Cuttack ...	1,168	1,049	1,107	1,027	1,072	1,015	1,060	1,034	1,045	1,014	1,056
Balasore ...	1,104	1,037	1,063	1,045	1,070	1,060	1,065	1,054	1,046	1,043	1,023
Puri ...	1,069	1,051	1,030	1,011	1,007	996	991	990	989	1,001	979
CHOTA NAGPUR PLATEAU	1,014	1,013	1,019	1,013	1,022	1,020	1,012	1,025	990	1,012	981
Hazaribagh ...	1,045	1,007	1,043	1,021	1,068	1,029	1,053	1,005	1,027	1,026	944
Ranchi ...	1,026	949	1,050	1,024	1,056	1,036	1,045	1,040	1,022	1,016	954
Palaman ...	996	1,001	1,013	1,016	1,033	1,033	1,036	1,035	1,016	1,016	954
Manbhum ...	937	996	983	1,010	992	1,020	1,013	1,013	1,014	1,030	955
Singbhum ...	993	1,042	1,035	1,034	1,029	1,033	1,010	1,006	1,002	998	966
Santal Parganas	1,006	993	1,017	1,003	1,019	1,006	1,015	1,010	997	995	1,000
Angul ...	1,059	1,041	1,028	1,024	1,000	990	983	...	985	...	979
Sambalpur ...	1,035	1,033	1,036	1,015	1,038	1,043	1,005	...	1,003	...	964
Orissa States ...	1,034	1,032	1,011	1,023	1,008	1,009	994	...	987	...	973
Chota Nagpur States	1,052	1,023	1,049	1,045	1,027	1,022	1,007	...	993	...	990

SUBSIDIARY TABLE II.—NUMBER OF FEMALES PER 1,000 MALES AT DIFFERENT AGE-PERIODS BY RELIGIONS AT EACH OF THE LAST FOUR CENSUSES.

PART I.—BENGAL, BIHAR AND ORISSA (Four Censuses).

AGE.	ALL RELIGIONS.				HINDU.				MUHAMMADAN.				ANIMIST.			
	1921.	1911.	1901.	1891.	1921.	1911.	1901.	1891.	1921.	1911.	1901.	1891.	1921.	1911.	1901.	1891.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
BENGAL, BIHAR AND ORISSA.																
0-1 ...	1,009	1,020	1,030	1,053	1,010	1,023	1,024	1,054	1,007	1,014	1,011	1,065	1,027	1,025	1,039	1,051
1-2 ...	1,037	1,065	1,062	1,076	1,031	1,067	1,061	1,075	1,044	1,064	1,060	1,082	1,053	1,054	1,081	1,067
2-3 ...	1,022	1,096	1,101	1,109	1,095	1,083	1,104	1,122	1,040	1,062	1,067	1,090	1,083	1,085	1,111	1,109
3-4 ...	1,126	1,113	1,115	1,121	1,124	1,118	1,134	1,117	1,106	1,109	1,098	1,114	1,114	1,117	1,163	1,133
4-5 ...	1,038	1,063	1,042	1,041	1,084	1,032	1,043	1,044	1,045	1,033	1,037	1,033	1,041	1,052	1,070	1,072
Total 0-5 ...	1,062	1,063	1,073	1,032	1,063	1,063	1,076	1,087	1,062	1,062	1,066	1,073	1,067	1,070	1,097	1,081
5-10 ...	973	974	973	952	973	973	963	961	970	990	970	937	983	989	984	963
10-15 ...	864	813	813	808	813	819	820	813	778	790	731	776	897	803	875	857
15-20 ...	1,023	1,045	1,045	1,029	975	1,001	1,005	985	1,108	1,133	1,126	1,118	1,075	1,090	1,071	1,074
20-25 ...	1,161	1,178	1,173	1,194	1,116	1,150	1,131	1,126	1,343	1,363	1,381	1,311	1,340	1,383	1,373	1,333
25-30 ...	1,010	1,014	1,008	1,070	1,009	1,008	999	1,050	1,013	1,014	1,023	1,028	1,061	1,023	1,068	1,123
Total 5-30 ...	990	1,001	1,001	1,002	980	991	992	994	1,003	1,014	1,014	1,013	1,028	1,041	1,033	1,031
30-40 ...	913	902	935	953	943	939	963	984	845	843	873	805	1,004	960	1,019	1,045
40-50 ...	887	917	940	939	931	950	939	963	818	843	874	834	900	920	974	941
50-60 ...	970	1,016	1,023	1,035	1,000	1,054	1,051	1,053	880	938	938	905	985	968	981	1,003
60 and over ...	1,159	1,213	1,263	1,305	1,261	1,305	1,344	1,376	950	1,029	1,102	1,165	1,133	1,191	1,238	1,183
Total 30 and over ...	944	964	984	1,011	985	1,003	1,030	1,042	859	884	918	944	990	984	1,027	1,030
Total all ages (actual population) ...	974	988	999	1,004	982	995	1,005	1,011	957	973	983	993	1,016	1,024	1,031	1,033
Total all ages (natural population) ...	975	991	1,003	1,019	Not available.				Not available.				Not available.			

SUBSIDIARY TABLE II.—NUMBER OF FEMALES PER 1,000 MALES AT DIFFERENT AGE-PERIODS BY RELIGIONS AT EACH OF THE LAST TWO CENSUSES.

PART II.—BIHAR AND ORISSA (Two Censuses).

AGE.	ALL RELIGIONS.		HINDU.		MUHAMMADAN.		ANIMIST.	
	1921.	1911.	1921.	1911.	1921.	1911.	1921.	1911.
1	2	3	4	5	6	7	8	9
0-1	1,008	1,022	1,008	1,021	990	1,030	1,035	1,030
1-2	1,038	1,051	1,033	1,054	1,042	1,024	1,065	1,057
2-3	1,100	1,090	1,103	1,088	1,101	1,107	1,079	1,083
3-4	1,145	1,209	1,148	1,128	1,174	1,186	1,114	1,117
4-5	1,040	1,044	1,047	1,043	1,043	1,088	1,041	1,050
Total 0-5	1,069	1,069	1,062	1,067	1,073	1,083	1,069	1,070
5-10	975	981	975	981	974	972	979	990
10-15	846	848	846	846	813	822	887	898
15-20	846	972	937	963	960	970	1,088	1,063
20-25	1,186	1,223	1,175	1,307	1,271	1,351	1,216	1,226
25-30	1,090	1,121	1,089	1,091	1,206	1,229	1,044	1,086
Total 0-30	1,001	1,016	998	1,011	1,018	1,038	1,016	1,037
30-40	1,056	1,030	1,051	1,034	1,103	1,113	1,080	1,003
40-50	1,011	1,041	1,013	1,041	1,020	1,074	989	897
50-60	1,061	1,110	1,090	1,108	1,088	1,151	1,077	1,071
60 and over	1,385	1,407	1,375	1,431	1,315	1,351	1,316	1,272
Total 30 and over	1,032	1,095	1,081	1,094	1,101	1,147	1,070	1,046
Total all ages (actual population)	1,022	1,043	1,027	1,040	1,046	1,074	1,032	1,040
Total all ages (natural population)	999	1,013	Not available.					

SUBSIDIARY TABLE III.—NUMBER OF FEMALES PER 1,000 MALES AT DIFFERENT AGE-PERIODS BY RELIGIONS AND NATURAL DIVISIONS (CENSUS OF 1921).

AGE.	NORTH BIHAR.			SOUTH BIHAR.			ORISSA.			CHOTA NAGPUR PLATEAU.				
	All Religions.	Hindu.	Muhamm.	All Religions.	Hindu.	Muhamm.	All Religions.	Hindu.	Muhamm.	All Religions.	Hindu.	Muhamm.	Christian.	Animist.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0-1	994	993	954	998	1,002	871	991	991	978	1,025	1,023	1,040	943	1,038
1-2	1,011	1,004	1,035	1,051	1,056	1,005	1,031	1,031	1,038	1,053	1,048	1,111	1,023	1,064
2-3	1,118	1,118	1,115	1,114	1,114	1,113	1,054	1,058	900	1,080	1,097	1,089	1,013	1,077
3-4	1,157	1,151	1,180	1,161	1,160	1,166	1,138	1,138	1,078	1,128	1,123	1,168	1,072	1,113
4-5	1,054	1,050	1,072	1,034	1,040	982	1,038	1,041	945	1,042	1,050	1,024	1,023	1,040
Total 0-5	1,070	1,067	1,083	1,070	1,072	1,049	1,053	1,055	996	1,071	1,074	1,076	1,015	1,068
5-10	968	964	975	925	933	853	1,014	1,014	961	925	1,063	980	1,065	978
10-15	815	819	794	809	802	884	853	856	841	883	859	724	811	889
15-20	805	891	914	904	891	1,050	1,075	1,070	1,274	980	923	996	939	1,040
20-25	1,221	1,308	1,392	1,127	1,112	1,317	1,234	1,227	1,456	1,171	1,163	1,114	1,221	1,215
25-30	1,107	1,087	1,217	1,072	1,047	1,354	1,383	1,377	1,478	1,040	1,050	966	1,034	1,043
Total 0-30	992	988	1,013	971	963	1,058	1,075	1,074	1,114	1,006	1,095	977	1,002	1,017
30-40	1,083	1,087	1,092	1,064	1,043	1,315	1,229	1,238	1,305	992	952	890	991	1,032
40-50	1,021	1,024	1,010	989	954	1,140	1,184	1,184	1,211	967	967	869	967	963
50-60	1,072	1,077	1,053	988	971	1,133	1,178	1,178	1,227	1,059	1,063	949	967	1,033
60 and over	1,384	1,398	1,318	1,250	1,282	1,343	1,517	1,515	1,597	1,254	1,376	1,179	1,251	1,322
Total 30 and over	1,094	1,096	1,092	1,055	1,038	1,237	1,238	1,238	1,300	1,032	1,030	931	1,020	1,074
Total all ages (actual population)	122	1,027	1,040	1,002	991	1,122	1,133	1,131	1,174	1,014	1,013	962	1,007	1,034
Total all ages (natural population)	996	Not available.		962	Not available.		1,047	Not available.		1,073	Not available.			

SUBSIDIARY TABLE IV.—PART I.—ACTUAL NUMBER OF BIRTHS AND DEATHS REPORTED FOR EACH SEX DURING THE DECADES 1891—1900, 1901—1910 AND 1911—1920.

Year.	NUMBER OF BIRTHS.			NUMBER OF DEATHS.			Excess (+) or deficit (—) of female births over male births.	Excess (+) or deficit (—) of female deaths over male deaths.	Excess (+) or deficit (—) of births over deaths.	Number of female births per 1,000 male births.	Number of female deaths per 1,000 male deaths.
	Males.	Females.	Total.	Males.	Females.	Total.					
1	2	3	4	5	6	7	8	9	10	11	12
1891 ...	532,235	557,078	1,149,903	429,123	378,327	807,450	— 34,547	— 50,700	+ 342,453	942	824
1892 ...	482,901	443,184	926,145	568,503	503,230	1,071,733	— 30,777	— 65,283	— 146,078	918	857
1893 ...	500,070	531,100	1,031,170	437,198	390,074	827,272	— 38,970	— 47,124	+ 263,898	930	820
1894 ...	552,750	520,685	1,073,335	679,879	509,511	1,279,390	— 32,165	— 80,308	+ 208,055	943	853
1895 ...	503,005	529,113	1,032,118	507,719	430,035	937,754	— 32,953	— 77,004	+ 163,838	941	846
1896 ...	630,733	599,891	1,230,623	605,445	512,400	1,117,845	— 36,841	— 93,039	+ 108,769	942	846
1897 ...	606,318	562,771	1,169,089	583,458	483,115	1,066,573	— 33,547	— 95,341	+ 87,618	944	837
1898 ...	672,794	638,735	1,311,529	413,777	360,749	774,526	— 33,968	— 63,029	+ 347,084	941	845
1899 ...	744,488	711,050	1,455,538	477,933	420,110	898,043	— 33,389	— 67,822	+ 557,645	955	879
1900 ...	627,877	609,663	1,237,540	617,653	565,183	1,182,836	— 29,314	— 62,469	+ 53,005	963	899
Total 1891—1900 ...	5,922,950	5,576,779	11,499,729	5,320,684	4,628,323	9,949,007	— 345,471	— 692,361	+ 1,550,029	942	870
1901 ...	678,550	643,954	1,322,504	549,880	514,900	1,064,780	— 34,596	— 31,980	+ 260,724	940	940
1902 ...	708,724	676,756	1,385,480	543,618	491,559	1,035,175	— 31,968	— 52,057	+ 350,305	955	903
1903 ...	715,720	684,733	1,400,453	604,283	553,450	1,157,733	— 30,966	— 40,813	+ 253,740	957	931
1904 ...	764,078	731,830	1,495,908	537,373	508,165	1,045,537	— 32,248	— 20,207	+ 450,371	958	946
1905 ...	705,237	674,287	1,379,524	600,508	533,154	1,233,662	— 31,000	— 37,354	+ 355,012	956	929
1906 ...	683,470	653,943	1,337,413	623,909	587,210	1,211,119	— 29,825	— 41,693	+ 131,306	957	924
1907 ...	674,694	644,360	1,319,054	629,117	611,540	1,240,657	— 30,534	— 17,877	+ 78,607	955	971
1908 ...	643,203	614,505	1,257,708	607,551	600,496	1,208,047	— 31,038	— 47,055	+ 87,279	951	923
1909 ...	655,301	625,623	1,280,924	561,407	522,789	1,084,196	— 30,609	— 28,638	+ 207,617	958	943
1910 ...	701,283	680,353	1,381,636	612,200	569,960	1,182,160	— 31,936	— 42,340	+ 188,480	964	921
Total 1901—1910 ...	6,534,624	6,219,474	12,754,098	6,001,828	5,643,203	11,645,031	— 315,150	— 355,680	+ 1,909,072	955	940
1911 ...	750,453	719,594	1,470,047	619,462	584,940	1,204,402	— 30,580	— 34,529	+ 265,915	959	944
1912 ...	746,245	712,050	1,458,295	551,145	512,283	1,063,428	— 34,195	— 38,862	+ 304,807	964	929
1913 ...	738,803	704,896	1,443,699	591,777	477,805	1,069,582	— 33,007	— 44,172	+ 444,407	964	915
1914 ...	747,626	714,054	1,461,680	601,265	476,578	1,077,843	— 35,771	— 25,687	+ 455,036	965	940
1915 ...	716,243	680,682	1,396,925	574,100	537,835	1,111,935	— 35,681	— 36,275	+ 244,880	960	937
1916 ...	650,053	613,204	1,263,257	555,277	546,098	1,101,375	— 37,439	— 30,179	+ 132,462	942	933
1917 ...	715,711	679,448	1,395,159	633,651	591,700	1,225,351	— 38,265	— 31,151	+ 180,606	949	930
1918 ...	665,830	625,311	1,291,141	1,001,463	954,751	1,956,213	— 37,619	— 46,711	+ 862,179	944	935
1919 ...	640,548	610,335	1,250,883	719,871	659,788	1,379,659	— 30,433	— 60,085	+ 358,784	944	917
1920 ...	671,131	642,537	1,313,668	555,411	511,721	1,067,132	— 28,794	— 43,890	+ 46,836	950	921
Total 1911—1920 ...	6,643,612	6,504,649	13,148,261	6,252,621	5,852,287	12,104,908	— 332,763	— 400,334	+ 1,243,553	950	926

SUBSIDIARY TABLE IV.—PART II.—NUMBER OF BIRTHS AND DEATHS REPORTED FOR EACH SEX IN EACH NATURAL DIVISION DURING THE DECADE 1911—1920.

NATURAL DIVISION.	NUMBER OF BIRTHS.			NUMBER OF DEATHS.			Excess (+) or deficit (—) of female births over male births.	Excess (+) or deficit (—) of female deaths over male deaths.	Excess (+) or deficit (—) of births over deaths.	Number of female births per 1,000 male births.	Number of female deaths per 1,000 male deaths.
	Males.	Females.	Total.	Males.	Females.	Total.					
1	2	3	4	5	6	7	8	9	10	11	12
BIHAR AND ORISSA	6,843,619	6,504,849	13,348,461	6,952,621	5,852,287	12,804,908	— 338,763	— 400,334	+ 1,243,553	950	926
North Bihar...	1,623,243	1,563,947	3,187,190	1,607,461	1,394,161	3,001,622	— 159,295	— 213,900	+ 504,567	944	918
South Bihar...	1,668,723	1,562,217	3,230,940	1,536,789	1,503,094	3,039,883	— 81,506	— 23,605	+ 216,057	951	924
Orissa ...	901,473	759,908	1,661,381	737,931	753,568	1,491,499	— 41,565	— 24,573	+ 10,992	943	929
Chota Nagpur Plateau...	1,550,174	1,468,777	3,018,951	1,340,440	1,301,674	2,642,114	— 57,397	— 138,766	+ 512,837	963	928

SUBSIDIARY TABLE V.—NUMBER OF DEATHS OF EACH SEX AT DIFFERENT AGES.

AGE.	1911.		1912.		1913.		1914.		1915.		1916.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
BIHAR AND ORISSA.	619,462	534,940	551,145	512,283	521,777	477,605	501,265	475,378	574,100	537,825	585,277	546,098
0-1 ...	145,054	126,521	140,549	121,721	131,806	115,975	132,533	117,411	139,633	123,053	125,174	112,549
1-5 ...	103,281	100,710	86,347	82,145	83,632	80,941	81,643	79,173	155,015	144,423	122,319	112,174
5-10 ...	66,343	48,082	44,068	35,556	39,014	33,103	34,072	32,332	43,007	35,708	37,436	30,172
10-15 ...	34,035	23,364	28,073	21,551	25,512	18,983	24,506	20,255	28,326	20,067	27,016	20,681
15-20 ...	21,943	20,273	18,874	16,789	17,160	14,985	18,807	15,568	19,410	17,079	19,288	15,470
20-30 ...	53,500	55,700	40,574	47,913	48,535	42,573	39,573	41,570	46,891	40,659	47,249	40,539
30-40 ...	52,733	50,565	45,077	43,955	45,432	40,257	41,024	39,974	51,101	45,547	52,342	42,846
40-50 ...	44,740	37,624	40,021	33,327	32,990	30,968	30,423	30,827	44,024	34,515	44,034	36,978
50-60 ...	41,441	40,227	37,129	35,594	35,295	32,731	32,543	32,493	46,897	39,457	43,873	42,129
60 and over ...	66,264	77,254	60,831	69,719	60,342	60,816	57,275	65,975	70,003	80,755	72,389	80,147

AGE.	1917.		1918.		1919.		1920.		Total.		Average number of female deaths per 1,000 male deaths.
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	
BIHAR AND ORISSA.	622,851	591,700	1,001,462	954,751	719,871	659,786	555,411	511,721	6,252,621	5,852,287	936
0-1 ...	133,119	115,020	155,166	141,076	117,103	105,341	100,454	85,213	1,324,141	1,174,006	867
1-5 ...	100,633	103,321	152,281	147,385	104,471	100,587	78,560	75,068	992,338	965,420	473
5-10 ...	54,902	48,420	83,183	70,009	80,587	50,574	44,574	37,024	516,803	438,700	450
10-15 ...	32,025	24,005	56,708	44,437	38,530	27,951	25,543	21,254	322,496	245,851	762
15-20 ...	20,769	15,324	45,479	41,773	29,694	25,073	21,650	15,812	230,990	206,305	800
20-30 ...	50,755	51,542	113,315	119,511	71,568	69,011	54,548	52,021	564,809	578,992	1,016
30-40 ...	54,372	51,170	117,700	112,625	60,382	60,644	61,230	54,339	605,556	554,705	916
40-50 ...	48,098	39,608	89,054	77,571	65,034	51,966	52,150	41,729	569,701	416,462	619
50-60 ...	46,140	45,901	74,165	70,782	60,742	55,427	46,292	43,927	455,827	439,208	957
60 and over ...	77,038	90,101	105,778	122,739	58,955	60,170	67,232	77,003	726,760	835,878	1,120

SUBSIDIARY TABLE VI.—NUMBER OF FEMALES PER 1,000 MALES FOR CERTAIN SELECTED CASTES.

CASTE.	NUMBER OF FEMALES PER 1,000 MALES.						
	All ages.	0-5.	5-12.	12-15.	15-20.	20-40.	40 and over.
1	2	3	4	5	6	7	8
ANGLO-INDIAN (Christian) ...	913	933	1,019	996	1,030	911	723
BAHHAN (Hindu) ...	949	943	916	701	701	693	1,092
BRAHMAN (Hindu) ...	969	1,013	919	731	578	1,022	1,120
BHUIYA (Hindu) ...	1,049	1,054	950	865	1,000	1,132	1,077
CHAMAR (Hindu) ...	1,137	1,173	952	901	1,027	1,274	1,196
CHASA (Hindu) ...	1,097	1,073	1,032	902	910	1,204	1,108
EUROPEAN AND ALLIED RACES (Christian). ...	632	1,059	1,000	952	590	621	643
GAURA (Hindu) ...	1,079	1,051	1,010	841	998	1,147	1,233
GOALA (Hindu) ...	984	1,061	932	798	850	1,025	1,080
INDIAN CHRISTIAN ...	1,015	1,005	958	939	965	1,066	1,061
JOLAHA (Muhammadan) ...	1,060	1,053	949	936	927	1,235	1,176
KARAN (Hindu) ...	1,120	1,022	1,015	964	1,076	1,134	1,388
KAYASTH (Hindu) ...	943	1,047	944	723	753	900	1,017
KHANDAIT (Hindu) ...	1,184	1,052	1,016	953	1,002	1,265	1,337
KOIRI (Hindu) ...	999	1,077	981	817	865	1,044	1,057
KURMI (Hindu) ...	1,017	1,029	954	803	831	1,056	1,139
MUNDA (Animist) ...	1,098	1,123	1,025	984	1,211	1,155	1,092
MUSAHAR (Hindu) ...	1,014	1,179	927	935	903	1,089	979
ORAON (Animist) ...	1,072	1,068	1,042	830	1,120	1,032	1,304
PAN (Hindu) ...	1,065	1,076	1,022	682	1,011	1,204	1,107
(Animist) ...	1,030	989	1,136	694	1,342	1,131	898
PATHAN (Muhammadan) ...	1,061	1,064	950	850	1,025	1,303	1,165
RAJPUT (Hindu) ...	944	1,016	900	663	730	943	1,126
SANTAL (Hindu) ...	1,033	1,067	975	870	850	1,088	1,119
(Animist) ...	1,011	1,060	963	864	1,073	1,055	1,036
TANTI (Hindu) ...	1,121	1,171	974	1,022	1,093	1,304	1,217
TELI (Hindu) ...	1,032	1,075	945	859	961	1,071	1,133

CHAPTER VII.

CIVIL CONDITION.

By "civil condition" is meant condition with reference to marriage, the population being divided from this point of view into three classes, unmarried, married and widowed. The statistics

INTRODUCTORY.

bearing on this subject will be found in Table VII, where the civil condition of the population is combined with age and religion, and in Table XIV where similar information is given for particular castes. At the end of the chapter proportional figures are given in the following Subsidiary Tables:—

Subsidiary Table I.—Distribution by civil condition of 1,000 of each sex, religion and main age period at each of the last five censuses.

Subsidiary Table II.—Distribution by civil condition of 1,000 of each sex at certain ages in each religion and Natural Division.

Subsidiary Table III.—Distribution by main age periods and civil condition of 10,000 of each sex and religion.

Subsidiary Table IV.—Proportion of the sexes by civil condition at certain ages for the main religions and Natural Divisions.

Subsidiary Table V.—Distribution by civil condition of 1,000 of each sex at certain ages for selected castes.

2. The enumerators were instructed to describe each person in column 6 of the census schedule as unmarried, married or widowed. A woman who had never been married was to be described as unmarried even though she was a prostitute or concubine: on the other hand persons who were recognized by custom as married, even though they had not gone through the full ceremony, for instance widows who had taken a second husband according to the rite known as *sagai*, were to be recorded as married, and divorced persons were to be treated as widowed. Marriage is one of the twelve purificatory rites which a Hindu must perform and no Hindu marriage is valid without a substantial performance of the requisite religious ceremonies. In the olden days certain forms of marriage were recognized by Hindu law which were unaccompanied by any religious ceremony. But those days are past; even in the *sagai* form of widow marriage which obtains amongst the Koiris and Halwais and various other castes of Bihar there is a religious ceremony the most important part of which is the placing of the *sindur* mark on the bride's forehead in the presence of assembled friends and relatives. Of the Christians also and the Animists generally it may be said that a religious ceremony is an essential part of marriage. To the Muhammadan marriage is a civil contract to the legal validity of which it is only necessary that there should be a proposal and acceptance made at the same meeting with a view to establishing marital relations between the parties. It is however the universal practice for the proposal and acceptance to be made at a formal gathering of relatives and friends called the *nikah* ceremony at which passages from the Koran are read and prayer is offered. The proposal and acceptance therefore assume the form of a religious ceremony, and amongst the more wealthy Muhammadans, though there is a great variety of family custom, "about half a dozen ceremonies" are performed "in addition to the *nikah* in which the distribution of sweets, the display of fireworks, singing, feasting and lighting play a prominent part according to the means of the parties. Apart from feeding the brotherhood and friends and acquaintances, servants, dependants and the

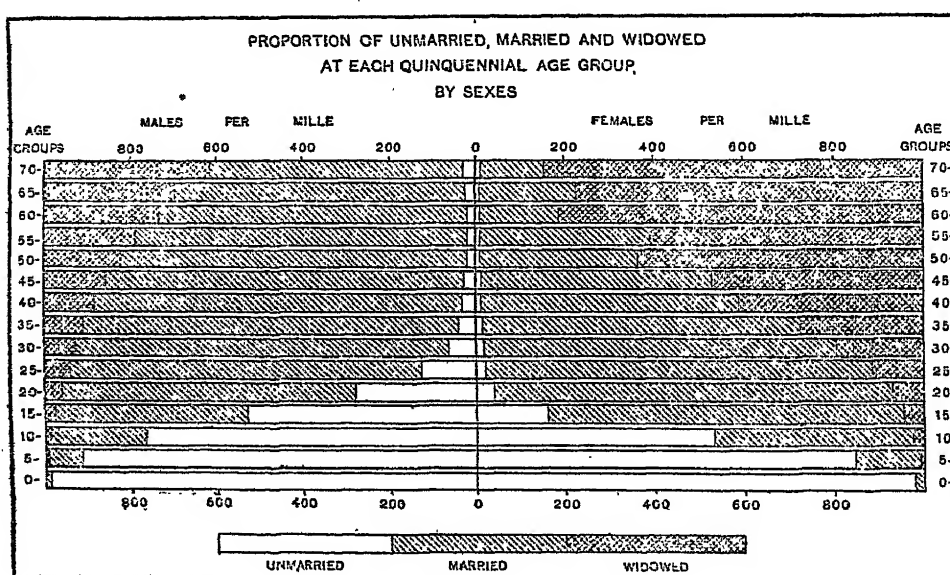
poor are also fed and clothes are distributed to them too". As a general rule therefore every marriage is accompanied by some outward form of ceremony and there should be no doubt in any case as to whether a person is or is not married. On the other hand there is the possibility of a falsification of the returns in certain cases. There are a certain number of persons co-habiting who, though they have not been through the formalities of marriage, may wish to make it appear that they have. Prostitutes in some cases, especially in Orissa, go through a form of mock marriage ceremony which is not commonly regarded as marriage, but which might be sufficient to induce them to describe themselves as married. Moreover a Hindu father of unmarried daughters of marriageable age, rather than admit the reproach, might try to induce the enumerator to return them as married. To this extent, which can hardly be appreciable and in the case of males must be entirely negligible, the statistics are liable to falsification.

3. The question also arises how far the number of widowed persons is affected by the fact that it includes the divorced. Hindu law, which permits a man at his pleasure to marry any number of wives, does not recognize divorce, though it is recognized by custom in certain localities and amongst certain castes usually through the intervention of a panchayat. Divorce however is not common amongst Hindus and in their case can be neglected. Muhammadan law, which treats marriage as a civil contract and permits a man to have only four wives at the same time, recognizes and permits divorce, either by the decree of a court at the suit of a husband or wife, or by mutual consent of husband and wife or by the act of any husband who when he has attained the age of puberty can divorce his wife without any misbehaviour on her part, without assigning any cause and without the intervention of any court. Generally however divorce amongst Muhammadans is said to be rare, and a divorce that occurred in a prominent family of Patna City a quarter of a century ago is still remembered as an event. Definite statistics regarding the prevalence of divorce amongst Muhammadans are however lacking. The proportion of Muhammadans is higher in the Kishanganj subdivision of Purnea than elsewhere in the province, but the records kept by the local registrars of Muhammadan marriages are obviously incomplete. In thana Islampur 175 marriages and 5 divorces were registered in 1921 and 150 marriages and 10 divorces in the previous year: in thana Kishanganj only 16 marriages and 3 divorces have been registered in the course of the last ten years. Here as elsewhere in the province matrimonial differences are often adjusted by bringing a criminal case under section 498 of the Indian Penal Code which is eventually settled out of court. In Purnea divorce is rarer amongst the poorer classes than amongst the well-to-do. Labour is scarce in this district and the proportion of females is low: a wife is valued as a domestic and agricultural helpmate who is not to be discarded lightly, and if she is divorced it is certain that she will soon find another husband. The District Officer reports in fact that many Muhammadan agriculturists of the district keep two or more wives. Cases in which Muhammadan wives divorce their husbands, though this is permissible in certain circumstances, are extremely rare except in Purnea where Muhammadan women enjoy greater freedom than elsewhere. It may be said therefore with some degree of certainty that the proportion of widowed persons to the population is not materially affected by the inclusion amongst the widowed of divorced persons who have not remarried.

4. One other fact must be emphasized before the statistics relating to marriage are examined and that is that Hindu girl wives who have not yet reached the age of puberty do not as a rule even live in the same house as their husbands; after the marriage ceremony it is customary for them to return to their own parents' houses till menstruation begins at the age of twelve or thirteen years; a fresh ceremony is then performed and the girl is taken to live in her husband's house as his wife. At the younger ages therefore the wives for practical purposes are not wives at all, and from the eugenic point of view it is not the

early age of marriage as shown in the census tables which is objectionable but the early age at which the effective marriage takes place, children becoming parents before they are fit to do so. Further information with regard to the age at which the second or effective marriage takes place will be found in the appendix to Chapter VI.

5. Of the 37,961,858 persons enumerated in the province, 14,819,208, of whom 8,494,039 were males and 6,325,169 females, returned themselves as unmarried; 18,475,926 persons, of whom 9,085,659 were males and 9,390,267 females returned themselves as married; and 4,666,724 persons, of whom 1,130,354 were males and 3,536,370 females, returned themselves as widowed. About half the population of the province therefore is married and of the remaining half three-quarters are unmarried and the rest widowed. The proportion of unmarried, married and widowed of each sex in each age group is given in Subsidiary Table I, Part II, and illustrated in the following diagram.



6. The salient features of this diagram will be seen at once by comparing it with the similar diagram prepared in 1911 for England and Wales, where very different conditions obtain. In the diagram on this page the married make their entry on both sides of the diagram in the first age period, 0-5. In the English diagram the married do not appear on the female side till the age 15-20 and on the male side till 20-25. From that point onwards the married occupy the greater part of the diagram in England and Wales as in Bihar and Orissa, but the proportion of unmarried in the former remains higher throughout, and, unlike Bihar and Orissa, higher in the case of the females than of the males. The proportion of unmarried males at the age 20-25 in England and Wales is 857 per mille against 281 per mille in Bihar and Orissa, while the proportions in the case of females are 757 and 37 respectively. At 40-45 the English proportions for unmarried males and females respectively are 148 and 180 against 32 and 11 in Bihar and Orissa, and at 60-65 they are 100 and 128 against 22 and 8. As regards the prevalence of the unmarried state at the reproductive ages it is the English and not the Indian figures that are remarkable. It is obviously natural for men and women to marry and celibacy and postponement of marriage are generally rare in history and rare to-day amongst Asiatic peoples. There are still countries in which even the name of "man" is denied to the unmarried. With the advance of civilization conditions become more artificial and less in accordance with nature: more anxious thought is exercised for the morrow in all relations of life and not least in regard to the procreation of children. In Bihar and Orissa and in India generally the natural instinct to marry and beget children has been encouraged by the teachings of religion. According to Hindu teaching marriage is a religious duty incumbent on all; a Hindu must marry and beget children for the salvation of his and his

ancestors' souls. The Prophet also taught that "when a man marries verily he perfects half his religion". With this encouragement and the example of the Hindus before them, to say nothing of the fact that a wife is an economic asset, it is not unnatural that marriage should be almost universal amongst Muhammadans also. In England on the other hand and in Europe generally, apart from the increasing influence of prudential considerations, there has always been the idea underlying the teaching of the Christian churches that "it is good for a man not to touch a woman". "Why," asks Tertullian, "should we long to bear children.....whom when we have them we desire to send before us,.....ourselves also longing to be removed from this most wicked world?" St. Augustine admits that some persons ask, if all men abstain from sexual intercourse, whence the human race will exist, but he goes on "Would that all would thus (*i.e.* abstain);.....much more speedily would the city of God be filled and the end of the world hastened". Similarly the Council of Trent anathematized any person who declared that the married was better than the unmarried state.* It is possible that the marriage rate in England to-day is not appreciably affected by teachings of this nature but the fact remains that under the influence of Christianity celibacy became for the first time in human history a factor of importance and that the tendency to refrain altogether from marriage has not in Christian countries met with that opposition from religion with which it is likely to meet in India. Marriage in Bihar and Orissa is however less universal than it was ten years ago: the proportions of unmarried and widowed in the population have increased and the proportion of married persons has decreased. In the case of both sexes the proportion of unmarried is higher up to the age of 40. The proportion of married is lower in all age periods for both sexes except in the case of married women of 60 and over where it is only one point higher per mille. The proportion of the widowed has increased in the case of males up to 20 years of age and in the case of females between the ages of 15 and 60. In this increase of widowed persons can be traced the effects of the influenza and the scarcity, and the influenza which attacked people of middle age is probably responsible also for some of the decrease of married persons. The relative increase of the unmarried in the earlier age periods can be ascribed partly to the decreases in the proportions of married and widowed and partly also to a growing tendency to postpone the age of marriage, to which a further reference is made in paragraph 14.

7. As between the sexes the married woman appears at the early ages in larger numbers than the married man, husbands being generally older than their wives. This higher proportion of married females is maintained up to the age period 30-35 at which point the male proportion passes it and remains above it to the end of life. The proportion of widowed in the two sexes is practically equal in the first age period: in the second and subsequent age periods the female proportion forges ahead of the male; a Hindu widower can easily marry again and usually does so, but a Hindu woman who is once a widow is likely to remain a widow. The proportion of male unmarried is higher than the proportion of female unmarried at every age period: for a Hindu woman to remain unmarried is a reproach and very few of them, who are not afflicted with some infirmity or who are not prostitutes or concubines, pass through life without being married; but there are a considerable number of male ascetics and mendicants who remain unmarried till they die.

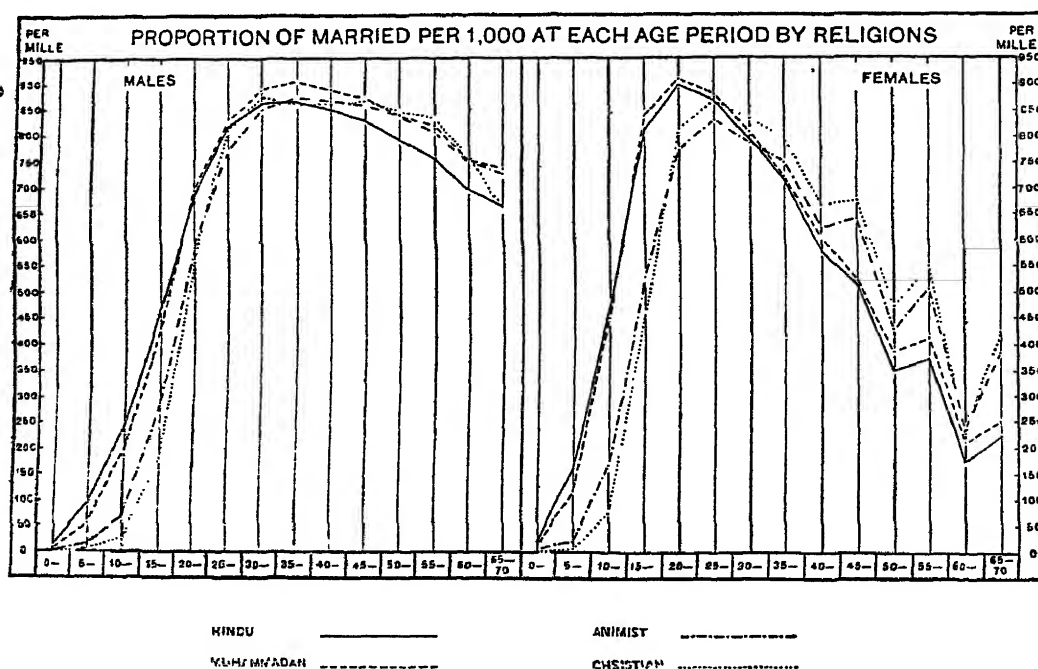
8. The proportion of married persons, both male (494 per mille) and female (495 per mille) is higher amongst Hindus than amongst the followers of any other of the main religions. The Aryas come even higher than the Hindus with proportions of 526 per mille in the case of males and 503 per mille in the case of females and they have a higher proportion of males and females married in the age period 0-5, which is probably due to the fact that many of their

MARRIAGE BY SEX.

MARRIAGE BY RELIGION.

* Cf. The Population Problem, A. M. Carr Saunders, page 264.

converts come from the lower castes but is remarkable seeing that the abolition of child marriage is an important part of their teaching. The Muhammadans come next with 477 per mille in the case of males and 489 per mille in the case of females; but in the Chota Nagpur Plateau Muhammadans of both sexes show a higher proportion of married than do the Hindus themselves. After them at an interval come the Animists and then the Christians. Civil condition and age are correlated with religion in Subsidiary Table I and illustrated in the following diagram.



9. The relative positions occupied by the different religions as regards the proportion of married persons are determined by the number of married persons in the earlier age periods. The proportion of married per mille of each sex aged 0-10 for each main religion is shown in the marginal statement. From the age of 20 onwards the proportions of married persons of both sexes in each age period are higher amongst the Muhammadans than the Hindus, but the Hindus as a whole have a higher proportion owing to the fact that they marry earlier and therefore preponderate in the earlier age periods. In the last few age periods the proportions of married Hindus of both sexes are lower even than those of the Animists and Christians. All the religions for which figures are given in Subsidiary Table I except the Aryas share the tendency to a declining proportion of married persons as compared with 1911.

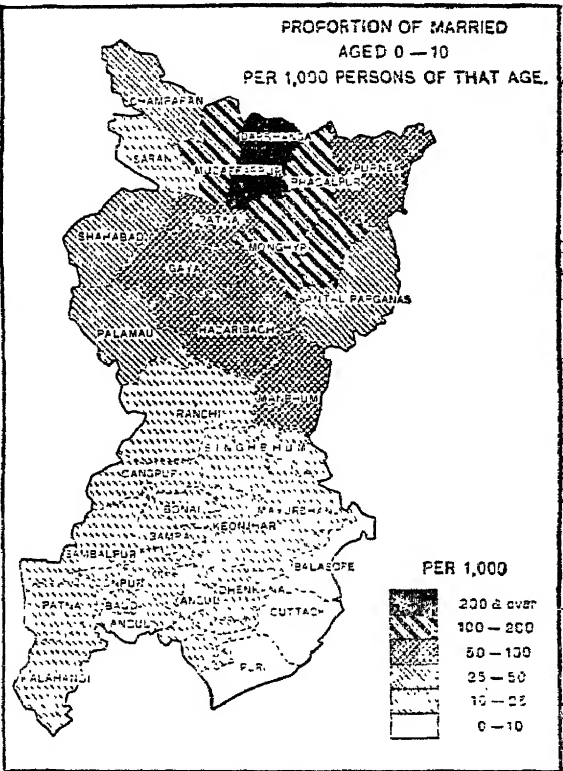
RELIGION.	Proportion of married per mille of each sex aged 0-10.	
	Males.	Females.
Hindu	59	100
Muhammadan	34	71
Animist	9	13
Christian	2	3

10. Marriage is more universal in the north of the province than in the south. North Bihar contains the highest proportion of married people, then comes South Bihar, then the Chota Nagpur Plateau and then Orissa. Here again the order is determined by the age at which it is customary to marry. In North Bihar the proportion of married children in the age period 0-5 is very much higher than in any other division: it is 20 per mille in the case of males and 33 per mille in the case of females. In South Bihar, which comes next, the proportions are only 11 per mille in the case of males and 19 per mille in the case of females. In the Chota Nagpur Plateau the proportions are insignificant: in Orissa they are *nil*. This relative order of the divisions is maintained (with one slight exception) till the age period 40 and over is reached. In order to show the local distribution of early marriage by districts

the proportion of married persons aged 0-10 to the total population of that age in each district is given in the following statement and illustrated in the map placed beside it.

PROPORTION OF MARRIED PERSONS AGED 0-10 PER MILLE OF THE TOTAL POPULATION OF THAT AGE.

NORTH BIHAR.			SOUTH BIHAR.		
Saran	...	19	Patna	...	54
Champaran	...	44	Gaya	...	64
Muzaffarpur	...	125	Shahabad	...	46
Darbhanga	...	282	Monghyr	...	121
Bhagalpur	...	173			
Purnea	...	56			
ORISSA.			CHOTA NAGPUR PLATEAU.		
Cuttack	...	4	Hazaribagh	...	69
Balasore	...	6	Ranchi	...	15
Puri	...	5	Palamanu	...	48
			Manbhum	...	62
			Singhbhum	...	15
			Santal Parganas	...	47
			Angul	...	10
			Sambalpur	...	11
			Orissa States	...	14
			Chota Nagpur States.	...	20



11. Darbhanga is still the home of infant marriage. In this district there are 9,541 married males and 15,965 married females, 326 widowed males and 647 widowed females who have not yet reached the age of 5. The practice obtains also to a less extent but still much above the average in the adjacent districts of Muzaffarpur and Bhagalpur. The marginal statement shows the proportion

INFANT MARRIAGE.

				Proportion of married aged 0-5 per 1,000 of that age.			
				Hindu.		Muhammadan.	
				Males.	Females.	Males.	Females.
BIHAR AND ORISSA	...	...	...	12	19	8	15
North Bihar	...	...	...	22	37	9	16
Darbhanga	...	...	...	64	103	19	34
Muzaffarpur	...	...	...	19	32	11	21
Bhagalpur	...	...	...	10	32	12	19

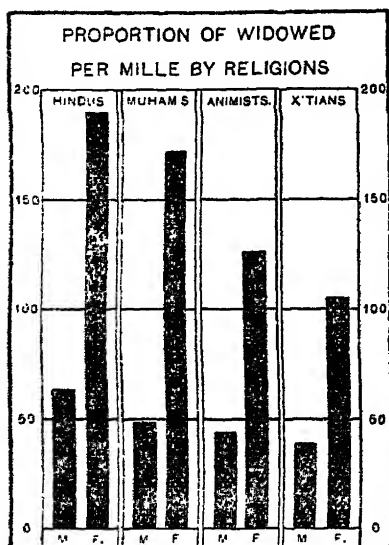
of married Hindu and Muhammadan children aged 0-5 in these three districts as compared with North Bihar and the province as a whole. The Darbhanga figures raise the figures for North Bihar so high that Muzaffarpur and Bhagalpur seem low in comparison but

they are well above the figures of South Bihar which are given in Subsidiary Table II. It will be noticed that the Hindu practice of infant marriage seems to have extended to the Muhammadans also in these districts, the Darbhanga figures for Muhammadans in particular being twice as high as those for the province or for North Bihar.

12. The proportion of widowed persons naturally follows the proportion of married persons with the reservation that religions which permit the re-marriage of widows will have a lower proportion of widows than those which do not. The Hindus, who have the highest proportion of married persons and amongst

THE WIDOWED BY RELIGION.

whom the remarriage of widows is much restricted, naturally have the highest proportion of widowed persons: 63 out of every 1,000 Hindu males and 190 out of every 1,000 Hindu females are widowed. They are followed by the



Muhammadans, Animists and Christians in that order. The relative proportions which will be found in Subsidiary Table I are illustrated in the marginal diagram. At the age period 0-5 the proportion of Muhammadan widows exceeds the proportion of Hindu widows, but the actual number of Muhammadan widows of this age in the whole of the province is 387 only, so that a few more or less would quickly alter this proportion: otherwise the proportion of widowed Hindus of both sexes exceeds the proportion of Muhammadans at every age. The Christian and Animist widowed are negligible before the age of 10 and their proportions remain below the Muhammadan proportions even after that age except in the case of Animist males between the ages of 20 and 60. Generally therefore the difference in the proportion of

widowed persons between one religion and another tends to occur at all periods of life.

13. The difference between the proportions of the widowed in the different Natural Divisions is marked. The proportional figures, which will be found

THE WIDOWED BY LOCALITY.

in Subsidiary Table II, are shown in the marginal diagram. South Bihar has the highest proportion of widowers (83 per mille), the number being nearly double the number in Orissa (45 per mille) where it is least: on the other hand Orissa, which is



a centre of Hindu orthodoxy and where the proportion of Hindus is also highest, has the highest proportion of widows (229 per mille). South Bihar, it will be remembered, has the lowest and Orissa the highest proportion of females in the province, but this fact alone does not explain the difference in the proportion of widows. For in South Bihar the proportion of widows per mille of the male population is only 74.1 per cent. of what it is in Orissa, while the difference between the proportions of females of all civil conditions per mille of the male population in the two divisions is less, the South Bihar proportion amounting to 88.4 per cent. of the proportion in Orissa. It is clear therefore that the high proportion of female widows in Orissa is due partly at least to the number and orthodoxy of the local Hindus. Possibly owing to their example but more probably as the result of the shortage of males in the population the proportion of Muhammadan widows is also

higher here than elsewhere, being in fact higher than the Hindu proportion in any other Natural Division.

14. The proportions of unmarried, married and widowed at different ages by caste is given in Subsidiary Table V. The practice of child marriage is most prevalent amongst the lower Hindu castes of Bihar and the marginal statement compares the proportions of married children aged 0-5 and 5-12 in those castes

CIVIL CONDITION BY CASTE.

mentioned in the table in which it is still most common with the proportions in the same castes ten years ago. The decrease is striking and common to both sexes and both age periods in every caste. It appears therefore that the growing tendency to postpone marriage till the age of puberty has much to do with the increased proportion of unmarried in the early age periods in Bihar.

CASTE	Proportion of married children per 1,000 of each sex of that age.							
	0-5				5-12			
	1921.		1911.		1921.		1911.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Chamar	20	31	34	63	197	200	273	353
Goala	16	29	44	72	220	334	300	436
Koiri	15	25	25	41	221	332	233	370
Kurmi	11	26	25	47	130	342	150	297
Musahar	23	33	30	51	191	305	230	352
Tanti	25	36	49	84	244	354	325	455
Teli	12	24	36	68	169	292	267	409

Amongst the Hindu castes of Orissa and the Muhammadans and Animists child marriage has never been so prevalent: amongst the Christians only one boy and one girl in every 1,000 aged 0-5 is married, and this is presumably owing to the recent conversion of the parents for infant marriage is alien to the ideas and practice of Christianity. The castes which show the highest proportion of widows are the Rajputs (267 per 1,000 females), the Brahmans (268), the Karans (256), the Babbans (255), the Kayasths (247) and the Khandaits (240), *i.e.*, the higher Hindu castes of both Bihar and Orissa. The proportions are much what they were in 1911 and no marked variation can be traced: if there has been an increased tendency to the marriage of Hindu widows its effects must have been obliterated by the influenza epidemic. The proportion of widows per 1,000 females amongst the Goalas who are the most numerous caste in the province and who have been consistently making efforts to raise themselves in the Hindu scale, by assuming the sacred thread and forbidding the remarriage of widows, has increased slightly from 168 to 173.

SUBSIDIARY TABLE I.—DISTRIBUTION BY CIVIL CONDITION OF 1,000 OF EACH SEX, RELIGION AND MAIN AGE PERIOD.

PART II.—BIHAR AND ORISSA.—(Two censuses).

RELIGION, SEX AND AGE.	1921.			1911.			RELIGION, SEX AND AGE.	1921.			1911.		
	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.		Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.
1	2	3	4	5	6	7	1	2	3	4	5	6	7
ALL RELIGIONS							CHRISTIAN.						
MALES ...	454	486	60	444	504	52	MALES ...	591	371	38	587	393	25
0-5 ...	980	10	1	983	17	1	0-5 ...	969	1	...	997	3	1
5-10 ...	915	52	3	855	110	5	5-10 ...	967	3	...	994	6	3
10-15 ...	798	233	11	724	264	12	10-15 ...	975	24	1	971	25	1
15-20 ...	527	450	23	498	470	23	15-20 ...	813	151	6	754	225	8
20-40 ...	128	807	65	117	830	53	20-40 ...	171	779	50	156	815	39
40-60 ...	27	836	147	27	845	122	40-60 ...	25	857	119	29	694	77
60 and over ...	35	681	314	25	682	287	60 and over ...	19	734	257	26	769	205
FEMALES ...	328	438	184	317	503	173	FEMALES ...	519	376	105	503	392	100
0-5 ...	981	18	1	966	32	2	0-5 ...	990	1	...	998	3	3
5-10 ...	846	146	8	795	164	11	5-10 ...	994	5	1	982	7	1
10-15 ...	635	441	24	472	508	25	10-15 ...	923	74	3	893	104	3
15-20 ...	162	792	46	130	828	42	15-20 ...	530	455	15	104	851	45
20-40 ...	21	824	155	19	841	140	20-40 ...	73	830	67	15	841	144
40-60 ...	9	460	502	9	494	407	40-60 ...	27	605	368	7	490	603
60 and over ...	8	176	516	8	175	617	60 and over ...	23	244	723	7	171	822
HINDU.							ANIMIST.						
MALES ...	443	494	63	429	516	55	MALES ...	560	396	44	567	403	30
0-5 ...	988	11	1	980	19	1	0-5 ...	990	1	...	996	4	1
5-10 ...	904	92	4	868	126	6	5-10 ...	985	14	1	920	10	3
10-15 ...	746	242	12	696	230	14	10-15 ...	932	65	3	933	98	...
15-20 ...	507	498	25	474	501	25	15-20 ...	701	259	13	689	302	2
20-40 ...	125	808	67	114	831	55	20-40 ...	173	766	61	168	806	36
40-60 ...	28	820	152	25	829	133	40-60 ...	29	850	121	23	888	89
60 and over ...	25	653	322	32	586	132	60 and over ...	23	705	272	18	766	216
FEMALES ...	315	495	190	300	516	134	FEMALES ...	477	397	126	482	403	115
0-5 ...	990	10	1	993	26	2	0-5 ...	996	4	...	995	4	1
5-10 ...	839	162	9	769	210	12	5-10 ...	979	20	1	979	19	2
10-15 ...	506	468	26	434	539	27	10-15 ...	826	166	8	808	155	7
15-20 ...	139	812	49	104	851	45	15-20 ...	442	525	30	393	650	27
20-40 ...	15	825	160	15	841	144	20-40 ...	59	753	123	74	627	99
40-60 ...	7	481	512	7	490	503	40-60 ...	32	563	408	26	580	364
60 and over ...	7	163	525	7	171	622	60 and over ...	26	267	715	21	250	729
MUHAMMADAN.							ABYA.						
MALES ...	474	477	49	474	481	45	MALES ...	394	526	80	393	492	110
0-5 ...	992	8	...	983	12	5	0-5 ...	971	29	...	976	23	...
5-10 ...	945	53	2	883	65	2	5-10 ...	959	41	...	950	37	4
10-15 ...	794	199	7	778	217	7	10-15 ...	765	231	14	750	238	14
15-20 ...	554	425	15	540	443	17	15-20 ...	450	511	30	440	520	40
20-40 ...	118	830	52	114	836	48	20-40 ...	98	829	73	127	776	97
40-60 ...	20	802	118	16	874	105	40-60 ...	19	830	153	42	742	216
60 and over ...	21	704	275	17	725	258	60 and over ...	24	555	421	24	389	587
FEMALES ...	339	489	172	328	491	181	FEMALES ...	306	503	191	290	483	227
0-5 ...	983	15	2	979	10	2	0-5 ...	983	33	4	987	13	...
5-10 ...	878	116	6	847	147	6	5-10 ...	949	51	...	903	90	7
10-15 ...	631	451	18	469	512	19	10-15 ...	574	415	11	522	448	29
15-20 ...	123	840	37	91	872	37	15-20 ...	45	904	51	96	822	62
20-40 ...	21	887	142	15	844	141	20-40 ...	17	818	165	17	90	193
40-60 ...	10	507	483	8	479	513	40-60 ...	5	538	459	6	498	406
60 and over ...	10	201	789	7	171	822	60 and over ...	14	182	804	...	165	845

SUBSIDIARY TABLE III.—DISTRIBUTION BY MAIN AGE PERIODS AND CIVIL CONDITION OF 10,000 OF EACH SEX AND RELIGION.

RELIGION AND AGE.	MALES.			FEMALES.		
	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.
1	2	3	4	5	6	7
ALL RELIGIONS ...	4,540	4,856	604	3,985	4,878	1,837
0-10 ...	2,047	146	1	2,405	219	13
10-15 ...	1,003	202	11	577	473	25
15-40 ...	587	2,526	216	184	4,320	56
40 and upwards ...	50	1,501	365	10	874	1,561
HINDU ...	4,425	4,944	631	3,146	4,553	1,901
0-10 ...	2,585	162	7	2,491	272	14
10-15 ...	968	314	15	540	500	24
15-40 ...	517	2,508	225	156	2,903	556
40 and upwards ...	55	1,600	384	16	872	1,302
MUHAMMADAN ...	4,744	4,767	489	3,387	4,894	1,719
0-10 ...	2,870	101	4	2,668	202	13
10-15 ...	1,086	253	9	529	457	16
15-40 ...	737	2,744	166	180	2,941	467
40 and upwards ...	41	1,655	310	21	800	1,201

SUBSIDIARY TABLE IV.—PROPORTION OF THE SEXES BY CIVIL CONDITION AT CERTAIN AGES FOR THE MAIN RELIGIONS AND NATURAL DIVISIONS.

[Number of females per 1,000 males.]

NATURAL DIVISION AND RELIGION.	ALL AGES.			0-10.			10-15.			15-40.			40 and over.		
	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
BIHAR AND ORISSA.															
All religions ...	745	1,034	3,129	970	1,753	2,312	591	1,670	1,559	230	1,194	2,563	367	535	3,521
Hindu ...	730	1,029	3,093	966	1,729	2,253	573	1,639	1,527	200	1,185	2,543	294	560	3,479
Muhammadan ...	747	1,074	3,677	973	2,133	3,055	544	1,847	2,070	209	1,272	3,080	531	561	4,051
NORTH BIHAR.															
All religions ...	713	1,033	2,934	944	1,560	2,259	501	1,397	1,573	164	1,153	2,278	266	591	3,558
Hindu ...	708	1,027	2,869	936	1,536	2,201	493	1,340	1,537	157	1,134	2,155	233	603	3,456
Muhammadan ...	733	1,073	3,520	978	2,059	2,960	526	1,916	2,068	168	1,261	3,006	474	534	4,223
SOUTH BIHAR.															
All religions ...	690	1,036	2,329	640	1,524	2,003	450	1,519	1,445	141	1,161	1,567	191	605	2,584
Hindu ...	691	1,024	2,253	636	1,531	1,975	464	1,459	1,414	139	1,159	1,545	171	599	2,511
Muhammadan ...	779	1,175	3,259	967	1,906	2,530	606	2,012	2,263	257	1,439	2,769	598	664	3,541
ORISSA.															
All religions ...	736	1,140	5,546	1,024	3,253	5,449	755	2,535	20,699	195	1,505	7,243	441	473	5,346
Hindu ...	734	1,135	5,799	1,025	3,315	6,000	752	2,569	31,323	192	1,502	7,225	433	473	5,293
Muhammadan ...	773	1,254	8,968	955	2,059	400	827	2,365	6,420	262	1,794	8,341	519	502	9,166
CHOTA NAGPUR PLATEAU.															
All religions ...	500	1,003	3,455	989	2,539	3,065	650	2,120	2,564	370	1,135	2,742	510	536	3,979
Hindu ...	775	999	3,616	997	2,660	2,983	611	2,172	2,976	287	1,136	2,598	643	507	4,150
Muhammadan ...	783	954	3,093	955	2,403	4,750	469	1,459	1,553	293	1,021	2,507	524	551	3,508
Christian ...	555	1,031	2,764	1,010	1,672	4,250	563	2,552	3,063	563	1,197	2,000	1,166	653	2,247
Animist ...	691	1,086	2,933	1,013	1,494	2,653	788	2,271	2,500	616	1,203	2,225	1,239	645	3,444

SUBSIDIARY TABLE V.—DISTRIBUTION BY CIVIL CONDITION OF 1,000 OF EACH SEX AT CERTAIN AGES FOR SELECTED CASTES.

AGE AGES.			DISTRIBUTION OF 1,000 MALES OF EACH AGE BY CIVIL CONDITION.												DISTRIBUTION OF 1,000 FEMALES OF EACH AGE BY CIVIL CONDITION.																						
			0-5.			5-12.			12-20.			20-40.			40 and over.			ALL AGES.			0-5.			5-12.			12-20.			20-40.			40 and over.				
CASTES.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.				
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	
1	688	817	45	1,000	...	...	980	11	...	903	37	...	465	613	23	95	700	100	568	358	74	1,000	...	...	903	8	...	880	91	20	187	747	66	101	677	310
ANGLO-INDIAN	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
BAHMAN	436	420	94	993	6	1	545	63	3	643	345	13	363	663	55	85	640	275	209	448	255	903	7	1	873	117	10	310	703	48	11	760	250	5	307	628	
BRAMHAN	480	440	80	920	8	2	920	27	4	738	367	15	107	727	66	51	704	245	278	454	283	301	8	1	645	143	0	143	761	71	0	736	265	7	321	670	
BHUIYA	493	444	61	900	8	2	945	53	3	635	320	36	107	617	76	35	705	180	400	438	163	673	17	11	800	93	18	374	557	65	42	780	160	21	453	523	
CHAMAR	406	523	59	970	20	1	751	107	0	435	555	40	62	673	66	32	810	103	304	537	159	908	31	1	697	360	13	187	760	44	16	804	128	8	421	529	
CHASA	543	417	40	900	1	...	180	11	...	875	123	3	188	773	40	11	843	141	338	411	203	900	1	...	951	47	3	407	575	28	18	807	175	7	320	661	
EUROPEAN AND ALLIED	556	406	38	1,000	1,000	903	34	4	575	309	20	107	741	93	438	476	98	1,000	1,000	830	164	...	223	736	41	213	536	361
GAURA	531	433	44	1,000	...	...	983	18	...	801	106	4	136	607	57	12	843	143	232	435	183	900	1	...	941	57	3	451	567	20	18	837	155	8	366	636
GOALA	371	543	86	983	16	1	773	330	8	430	547	33	70	836	66	20	741	289	276	551	173	970	20	1	631	324	15	157	787	56	13	853	121	7	451	523	
INDIAN CHRISTIAN	591	370	39	999	1	...	965	4	1	875	130	5	143	803	63	10	820	163	513	381	106	930	1	...	980	10	1	608	314	18	63	827	100	23	518	500	
JOLAH	498	509	65	993	7	...	883	114	4	431	528	31	58	874	68	18	783	200	319	528	153	976	23	2	761	230	10	105	778	37	24	887	110	15	401	491	
KARAN	549	493	49	1,000	906	4	...	963	30	3	313	663	34	28	810	103	383	381	256	1,000	965	14	1	631	328	21	20	700	214	6	300	685
KAYASTH	495	418	87	993	7	...	964	39	4	786	106	10	247	685	68	70	677	253	336	417	247	980	11	...	944	47	9	354	617	40	17	750	234	12	351	637	
KHANDAIT	557	402	41	1,000	905	5	...	935	63	2	233	736	31	13	834	163	361	399	249	1,000	973	20	1	514	455	31	12	773	215	6	303	602
KOUL	365	546	89	981	18	1	738	231	10	403	557	40	87	821	63	37	734	330	272	545	183	973	25	3	648	333	20	140	705	56	15	843	143	10	418	543	
KURMI	418	506	76	988	11	1	811	120	9	903	466	33	96	821	80	35	747	318	295	504	201	971	20	3	738	243	20	178	700	63	19	803	170	13	406	582	
MUNDA	573	382	45	999	1	...	902	8	...	820	155	6	164	774	63	23	817	160	496	380	124	908	1	1	970	20	1	627	320	23	64	812	134	18	464	488	
MUSAHAR	503	533	75	974	25	1	700	101	10	907	555	48	65	864	81	21	777	293	327	544	129	901	33	3	716	268	16	184	763	54	18	870	112	6	506	428	
CRAON	510	429	61	999	1	...	965	14	1	904	823	13	47	880	94	8	800	102	426	422	152	900	1	...	955	43	3	353	611	17	10	820	163	7	445	548	
PAN (Hindus)	566	392	35	1,000	...	...	902	8	...	914	83	3	169	708	43	11	805	154	430	400	170	900	1	...	970	20	1	578	401	21	35	816	150	8	360	623
Do. (Christians)	560	405	29	1,000	980	20	...	902	98	...	307	743	51	26	808	76	518	368	114	1,000	964	6	...	787	302	11	98	720	143	10	481	500
PATHAN	502	425	53	995	4	1	960	28	3	744	239	17	153	702	55	24	820	136	366	448	196	991	8	1	900	83	8	345	600	52	29	807	164	14	402	561	
RAJPUT	527	380	54	995	4	1	908	30	2	763	219	18	305	623	72	97	681	232	313	430	267	988	11	1	895	67	8	302	613	55	17	738	245	8	330	663	
SANTAL (Hindus)	551	408	41	995	6	...	976	23	1	732	253	16	105	777	58	20	843	132	453	401	146	905	6	...	940	51	3	501	465	34	61	788	151	20	426	554	
Do. (Christians)	539	419	42	998	2	...	988	16	1	770	311	10	145	798	57	18	848	134	451	427	132	907	3	...	901	37	3	515	454	31	53	830	117	13	528	459	
TANTI	378	549	72	973	25	2	727	244	10	455	490	55	90	833	71	23	700	179	270	540	190	903	36	1	626	354	21	106	744	60	10	834	167	9	426	556	
TELI	399	533	68	987	12	1	823	109	8	483	486	33	78	850	72	15	760	106	287	528	135	976	24	1	616	362	13	100	761	63	13	836	161	7	410	583	

CHAPTER VIII.

LITERACY.

The statistics of literacy will be found in Imperial Table VIII which consists of two parts, a provincial summary giving statistics for all religions combined and for every religion separately in four age groups, and a second statement giving statistics by the same age groups for each district and city separately for all religions together and for each of the main religions. Imperial Table IX gives statistics of literacy for some of the most important castes and tribes. Proportional figures and certain other statistics relating to literacy will be found in the following Subsidiary Tables at the end of this chapter :—

INTRODUCTORY.

Subsidiary Table I.—Literacy by age, sex and religion.

Subsidiary Table II.—Literacy by age, sex and locality.

Subsidiary Table III.—Literacy by religion, sex and locality.

Subsidiary Table IV.—English literacy by age, sex and locality.

Subsidiary Table V.—Progress of literacy since 1881.

Subsidiary Table VI.—Literacy by caste.

Subsidiary Table VII.—Number of educational institutions and pupils according to the returns of the Education Department.

Subsidiary Table VIII.—Number and circulation of newspapers and periodicals.

2. In 1881 and again in 1891 the population were divided into three classes, 'literate', 'illiterate' and 'learning': those who were 'under instruction either at home or at school or college' were recorded as 'learning'; persons able both

MEANING OF LITERACY.

to read and write any language but not under instruction were to be classed as 'literate', and the remainder as 'illiterate'. Experience showed that this classification was not satisfactory because children who had only recently started going to school were classed as 'illiterate' while those who had been at school for some time and had learned to read and write were classed as 'literate'. The class of 'learning' was thus depleted at both ends and the number of persons under instruction bore no resemblance to the statistics of the Education Department. At the next census therefore, that of 1901, the class of 'learning' was dropped out of the classification and the population was divided into 'literate' and 'illiterate', the 'literate' being persons who could read and write any language. No instructions were given as to the degree of proficiency in reading and writing required to satisfy the test of literacy, and considerable local variations resulted. In Madras instructions were issued that only those who could write a letter to a friend and read the reply should be entered and this test was extended to the whole of India in 1911. The result was that the increase of literacy between 1901 and 1911 was not fully brought out by the census figures because certain classes of persons were excluded from the ranks of the literate in 1911 who had been included in 1901, namely school children who could read and write a little but were not capable of conducting a private correspondence, and that numerous class of persons who could read sufficiently to decipher the sacred texts but could not write unless it was to sign their own names. On the present occasion the instructions were the same as in 1911: for the first time therefore the literacy statistics are strictly comparable with those of the preceding census.

3. As children under the age of 5 years cannot from the nature of things be literate in the sense of being able to conduct a correspondence with their friends, it is better to neglect them for the purposes of calculating the proportion of literate persons to the population. The proportion of the population in the first five years of life may vary greatly from census to census (it has done so since 1911) and it is undesirable that these fluctuations should affect the proportions of literate persons to the population. In accordance therefore with a practice that is being adopted in other countries

the proportion of literate persons has for the first time been calculated not on the whole population but on the population aged 5 and over, and hereafter in this chapter, except when the contrary is expressly stated, all proportions given will be proportions of the population aged 5 and over, persons under 5 being entirely neglected.

4. The number of persons in Bihar and Orissa who are literate in the sense explained is 1,701,489 which is 45 persons per 1,000 of the whole

GENERAL EXTENT OF LITERACY.

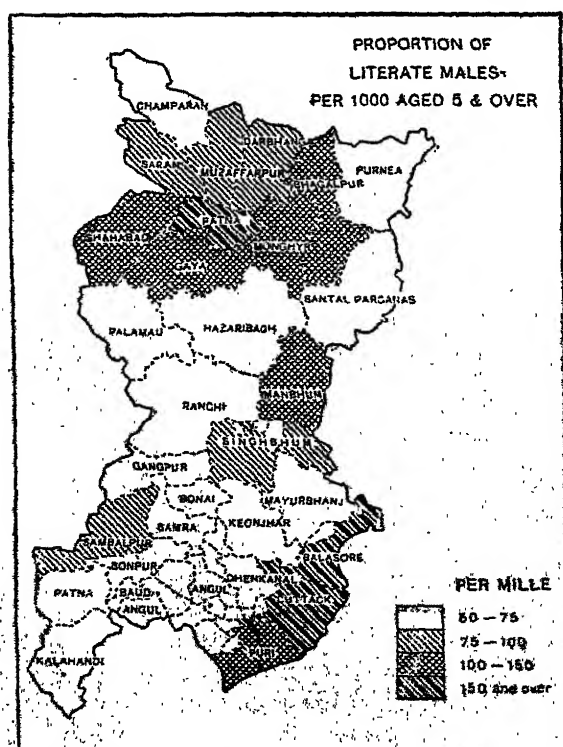
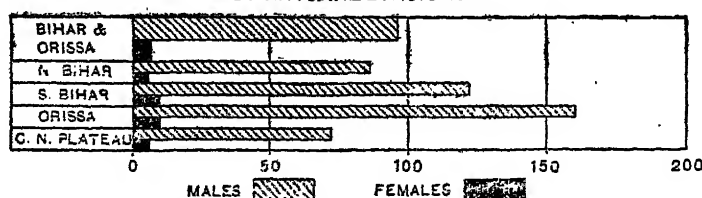
PROVINCE.	Proportion of literate persons per 1,000 aged 5 and over.
Burma	314
Bengal	104
Madras	98
Bombay	83
Bihar and Orissa ...	81
Punjab	45
Central Provinces ...	43
United Provinces ...	42

population or 51 per 1,000 of the population aged 5 and over. Of these the vast majority, (1,591,754) are males while only 109,735 are females, there being between 14 and 15 literate males to every literate female. If the sexes are considered separately, 95 males and 6 females out of every 1,000 aged 5 and over are literate. The marginal statement compares Bihar and Orissa with some other provinces in point of literacy.

5. The following diagram and map show the distribution of the literate population. The map relates to males only, but where literate males are numerous there generally will the literate females be numerous also. The most literate part of the province is Orissa where 160 males and 9 females in every 1,000 are literate. In South Bihar which occupies

LITERACY BY LOCALITY.

NUMBER OF LITERATE PERSONS PER 1000 AGED 5 AND OVER BY NATURAL DIVISIONS



the second place, the proportion of literate females is the same (9) but the male proportion is only 122. Elsewhere the standard is much lower: in North Bihar the male proportion is 86 and the female proportion only 5 per 1,000; in Chota Nagpur the male proportion sinks to 72 but the female proportion is 6 or one better than North Bihar. Among the districts the first prize for both sexes goes to Patna: in point of male literacy Patna only just surpasses Cuttack, which was ahead of it (as was also Balasore) ten years ago, but in point of female literacy Patna is easily first with 16 per 1,000, the only other district which reaches double figures at all being Puri with 10. This pre-eminence of Patna in female literacy is no new thing: it has always stood ahead of other districts in this respect since the statistics were first recorded. So far as educational institutions are concerned Patna is no better provided than many other districts; true it contains the one college for females and 2 of

the 4 high schools for females that there are in the province, but the presence of a few highly educated ladies cannot account for the generally high percentage of literate females in the district. The reason is rather to be sought in the fact that the proportion of persons in this district who live in towns is and has been from time immemorial far higher than elsewhere and that life in towns is much more conducive to the spread of literacy than life in the villages. After Patna comes Cuttack with 171 males and 9 females literate in every 1,000 and, treading close on the heels of Cuttack in respect both of male and female literacy, comes Balasore with 164 males and 8 females. Puri surpasses both these districts in female literacy with 10 literate per 1,000 but in male literacy it falls considerably behind with 132. This high percentage of literacy amongst males in Orissa is of old standing; indeed in the days when the test of literacy was less strict than it has been at the last two censuses the pre-eminence of Orissa in male literacy was more marked than it is to-day. There is no connexion between urbanization and literacy in Orissa: here the relatively high standard of education seems to be connected partly with its position on the coastal strip which connects what are, with the exception of Burma, the most highly educated provinces of India, namely Madras and Bengal, and partly with the clerkly traditions of a country where priests are many and where the uses of the pen have been more congenial than those of the sword. After these four districts come Gaya and Manbhum. In Manbhum there is no ancient tradition; literacy has spread with the growth of modern conditions, and this is not only true of the coal-field for the number of literate persons in the Sadr subdivision also is high. The existence of a large educated community at Purulia, of the railway colony at Adra, of the various centres of the lac trade and last and most important the close connexion with Bengal all help to swell the extent of literacy in the district. Gaya like the remaining two districts of South Bihar, Shahabad and Monghyr, can boast of over one man in ten being literate. The only other district not yet mentioned that can do this is Bhagalpur in North Bihar where the standard of male literacy is the same as it is in Monghyr (106 per 1,000). Next to Bhagalpur in North Bihar comes Saran, which with 96 literate males in every 1,000 just fails to reach the one in ten standard, then Darbhanga and then Muzaffarpur. Champaran is the lame duck in this division: it lags far behind the other Tirhut districts and just behind Purnea. The last division in point of literacy is the Chota Nagpur Plateau. Here Manbhum leads and Singhbhum, whose rise in the scale of literacy is due, as in the case of Manbhum, to the growth of modern industry, comes next but at an interval. Sambalpur maintains the Orissa tradition of literacy amongst males to some extent but the standard amongst females is not so high. In Ranchi and the Santal Parganas on the other hand the standard amongst females is high: in Ranchi the male standard is fairly high but in the Santal Parganas it is low.

6. The marginal statement shows the proportion of literate persons in the different cities. Patna comes first amongst cities as it does amongst

LITERACY IN CITIES.

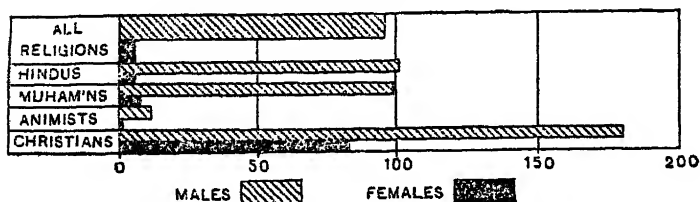
Proportion of literate persons in cities per 1,000 of population aged 5 and over.		
	Males.	Females.
Patna	359	82
Gaya	341	51
Bhagalpur ...	305	48
Jamshedpur ...	273	72

districts in respect of both sexes: apart from the long urban tradition behind it this result is partly due to the fact that there are a number of educational institutions at Patna at which persons who have already learned to read and write in other districts come to pursue their studies: some of the lustre therefore is borrowed. Gaya and Bhagalpur represent a lower standard of literacy and as regards males Jamshedpur represents a still lower one. In female literacy on the other hand Jamshedpur comes second, this being due to the fact that a large proportion of the unskilled casual immigrants are men unaccompanied by their wives: the female population is small and such as it is it consists partly indeed of illiterate women who come to work as shovellers in the coke ovens or as

carriers but largely of the educated womenfolk of the more highly qualified employees who come to Jamshedpur on a contract for several years bringing their families with them.

7. Proportional statistics of literacy by religion will be found in Subsidiary Table I and the figures for the main religions are illustrated in the marginal diagram. Christians of European or other allied race have naturally the highest proportion of literates. The occupations of such persons nearly always

NUMBER OF LITERATE PERSONS PER 1000 AGED 5 AND OVER
BY RELIGIONS



also (526 per mille). The appeal of the Brahmo Samaj is particularly to the educated and literary classes and the stress laid in this community on the education and enlightenment of both sexes is reflected in the census figures. The Aryas have also a high proportion of literate males (424 per 1,000) which is specially noteworthy as many of the converts come from the lower castes, but in respect of female literacy (77 per 1,000) they fall far behind the Brahmos. After the Aryas come the Indian Christians with 145 males and 56 females literate out of every 1,000. The majority of the Indian Christians in this province come from the Chota Nagpur Plateau and are of aboriginal origin: generally speaking where the number of Christians is smallest their proportion of literacy is highest, but even in Ranchi district where the Christians are most numerous, reaching a total of 197,216 in all, and almost entirely of aboriginal origin, the proportion of literacy is 130 per 1,000 males and 37 per 1,000 females, which is far ahead both of Hindus and Animists in that district. Amongst the Hindus in the province as a whole 101 males and 6 females in every 1,000 are literate and amongst the Muhammadans 99 males and 8 females: even amongst males the Muhammadan is higher than the Hindu proportion in every district except the four districts of Tirhut, Balasore and the Santal Parganas, but as 35 per cent. of the Muhammadan population of the province occurs in the Tirhut Division the low standard of literacy there obtaining has a depressing effect on their general standard. As regards female literacy the Muhammadan standard is higher in every district except Muzaffarpur and Hazaribagh where it is lower and Darbhanga, Bhagalpur and Puri where it is equal to the Hindu standard. A very similar state of affairs was disclosed at the last census, and the chief cause of it would appear to be that the Muhammadans are more addicted to town life than the Hindus; it is only in North Bihar where the proportion of Muhammadans living in urban areas is lower than elsewhere that they fail to maintain a standard of literacy higher than amongst the Hindus. As would naturally be supposed the standard of literacy amongst the Animists is far lower than in the case of any other religion, being 12 per 1,000 in the case of males and only 1 per 1,000 in the case of females. In Chapter IV the opinion was offered that the Tana Bhagat movement was the expression of a feeling latent amongst the Oraons of dissatisfaction with their state and that this feeling was by no means confined to the Oraons but was fairly general amongst the aboriginal tribes. It was also suggested that, so far as the Tana Bhagat movement was consciously directed, that direction was not towards Hinduism. Hitherto the educated Animist has tended to turn Hindu or Christian. It will be interesting to see how far in future educated members of aboriginal tribes will be able to assimilate education and ideas without abandoning their tribal beliefs and customs.

8. As compared with 1911 there has been a general advance in the standard of literacy, which is common to both sexes and all the main religions. In spite of the decrease of population, 191,939 more persons were recorded as literate in the province than were so recorded ten years ago, the number now standing at 1,701,489. In 1911 out of every 1,000 males (*i. e.* aged 5 and over) 88 only and out of every 1,000 females not 5 could read and write: now out of every 1,000 males 96 and out of every 1,000 females 6 can do so. Amongst males the progress is most marked in South Bihar and Orissa and amongst females in South Bihar. This is natural for these are already the most literate areas and the increase of literacy is cumulative: where there are literate parents the children will have greater facilities for acquiring the arts of reading and writing than where the parents are themselves illiterate, and education diffuses an atmosphere favourable to its own advancement. In South Bihar and Orissa there has been an advance in every district. In North Bihar there has also been an advance in every district except Purnea where Hindus and Muhammadans both show a certain falling off for which it is difficult to assign any particular reason: the number of girls who attend schools in this district has doubled in the last ten years and the number of boys has risen from 25,000 to 35,000. In the Chota Nagpur Plateau likewise the proportion of literates has increased everywhere except in the Santal Parganas and the Chota Nagpur States. Unfortunately much reliance cannot be placed on the literacy statistics for the Santal Parganas for side by side with a marked decrease of literacy amongst males there is a phenomenal increase of literacy amongst females and it seems incredible that both these results should be correct: it is true that the number of girls who go to school has more than doubled since 1911, but the number of school-going boys also has increased from 29,000 to 40,000. In the Chota Nagpur States the decrease in the number of literate persons does not amount to 200 all told. In all districts other than those mentioned there has been an all-round improvement.

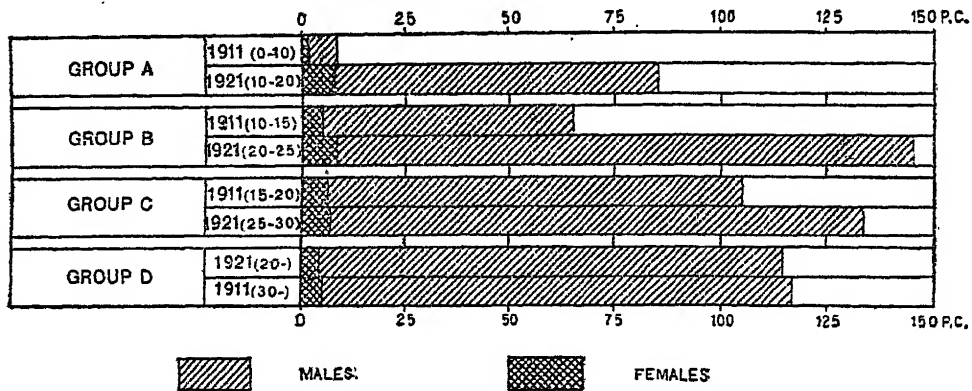
9. Amongst the male sex the literacy increases with increasing age. At the age-period 5-10 18 males in every 1,000 are literate, at the age-period 10-15 70, at the age-period 15-20 111, and amongst men of 20 and over 126. Amongst females the proportion rises in the first three age-periods from 3 to 8 and again to 10 in every 1,000 but amongst women of 20 and over it sinks to 7. The principal reason of the lower standard of literacy amongst adult women is that the spread of female education is a phenomenon of fairly recent origin and it has not yet had time to penetrate into the more advanced age-periods; the proportion of literate adult women in this group will steadily increase in the next few years as the pupils who pass out of the girls' schools reach womanhood. Secondly, there is less necessity in a woman's life for practising the arts of reading and writing than there is in a man's and there is the possibility of arts learnt at school being forgotten. In order to examine this question of loss of literacy after school-going age the age-period "20 and over" was in the process of sorting and compilation split up into the three groups, "20-25", "25-30" and "30 and over", so that the groups of persons who appeared in the 1911 tables as aged "10-15" and "15-20" might be re-identified as those aged "20-25" and "25-30" in 1921 and re-examined in respect of their literacy. The results are shown in the following table and diagram. Group A includes the persons aged 0-10 in 1911 who reappear in 1921 as aged 10-20; Group B includes the persons aged 10-15 in 1911 and 20-25 in 1921; Group C includes those aged 15-20 in 1911 and 25-30 in 1921; and Group D those aged 20 and over in 1911 who are now aged 30 and over. As far as possible therefore the same groups of persons have been isolated after a period of ten years. Death has of course been reducing their number in the interval but it may be assumed that the literate and illiterate have fallen under his sway in equal proportions. Also it must be remembered that, the age returns being as inaccurate as they are, it is too much to hope that persons have not strayed

from one group to another. Nevertheless the main results must be substantially correct.

INCREASE OF LITERACY PER MILLE IN THE LAST TEN YEARS.

	GROUP A.		GROUP B.		GROUP C.		GROUP D.	
	1921.	1911.	1921.	1911.	1921.	1911.	1921.	1911.
Males	85.8	8.9	145.5	65.7	134.0	105.7	117.7	115.4
Females	8.6	1.2	9.5	5.4	7.4	6.9	5.2	4.2

INCREASE OF LITERACY DURING LAST TEN YEARS
IN CERTAIN GROUPS



As would naturally be expected the proportions increase most rapidly in the groups which were of school-going age during the interval. In the case of males the proportion in Group A has increased nearly tenfold and in Group B it has nearly doubled. In Group C the rate of progress slows down, for most people who become literate do so before they reach the age of 15-20: in Group D there is still progress but only slight. The fortunes of Group D are however the most interesting of all, for it is this group which disproves the theory of a considerable loss of literacy after school-going age. The figures above prove that though there may be a loss of literacy in a few cases the loss is more than made good; a certain number of men and women must acquire the arts of reading and writing after they have passed school age, either by private study or else without deliberate intention in the pursuit of their businesses.

10. The number of males recorded at the census as literate in English was 129,735 or 8 per mille and the number of females 8,364 or 0.5 per mille.

The number of persons literate in English is greater by 56,211 or 69 per cent. than it was in 1911, the increase being noticeably more rapid than in the preceding decade. After the European Christians, whose native language is in most cases English, by far the highest proportion of literacy in English is found amongst the Brahmos with 377 literate in English in every 1,000 males and 265 in every 1,000 females. Next come the Aryas with 90 in every 1,000 males but only 3 in every 1,000 females. The proportion of Indian Christian males who are literate in English is 35 per mille or about one-third of the Arya proportion, but in regard to females the tables are turned for the Indian Christian proportion (10 per mille) is about three times as high as the Arya proportion. Amongst the Muhammadans the average of literacy in English is 11 per mille amongst the males and 0.3 per mille amongst the females. The Hindus account for over 100,000 of the 130,000 persons literate in English in the province but the proportion amongst Hindu males is only 7 per mille and amongst Hindu females only 0.2 per mille. The increase has occurred in every Natural Division and every district, except amongst females in Palamau where a decrease is shown amounting

only to 122 persons out of a total female population of 366,023. The highest all round proportion amongst males is in Orissa and the highest amongst females in South Bihar. Amongst districts, thanks to the assistance of the British troops at Dinapore, Patna again just leads in regard to males with 205 per 10,000, but Singhbhum where owing to the sudden growth of Jamshedpur the proportion of males literate in English has jumped to 191 per 10,000, comes close behind. As regards females, though it only contains 775 females literate in English of whom 521 are in Jamshedpur, Singhbhum defeats Patna with 1,375 in the matter of proportion. Manbhum is the only other district where one female in 1,000 is literate in English.

11. Statistics with regard to the extent of literacy in particular castes and tribes will be found in Imperial Table IX and proportional figures in

LITERACY BY CASTE.

Subsidiary Table VI. If the Europeans and Anglo-Indians be omitted, the most literate caste

in the province, as is only fit and proper, is the writer caste; amongst the Kayasths 657 males and 95 females or 385 persons in every 1,000 are literate and they also stand easily first as regards literacy in English. After them come the Karans, the writer caste of Orissa, with 283 persons literate in every 1,000. The Brahmans with 180, the Babhans or Bhumi-har Brahmans with 139 and the Rajputs with 124 persons literate in every 1,000 form a group which in point of literacy stands half way between the writer castes and the rest of the population. In Orissa the Khandaits can show 87 persons literate in every 1,000 of the caste, but in Bihar, amongst the castes tabulated, the next below the Rajputs are the Kurmis with only 44 per mille. The Goalas, the most numerous of all castes, can only show 15 per mille. Literacy therefore is at present to some extent the privilege of a few of the upper castes. It will also be noticed that where separate figures are given for the Hindu and Animist portions of any tribe the proportion of literacy amongst the Hindus is generally quite twice as high as amongst the Animists.

12. Subsidiary Table VII at the end of the chapter gives statistics of the development of educational institutions in the province. The number

EDUCATIONAL INSTITUTIONS.

of students receiving collegiate education in public institutions in the last ten years has almost doubled: an intermediate college for women was opened in 1915 and affiliated to the university in 1920. Under the head "School education—general" there has been steady progress: 769,102 pupils or 2·3 per cent. of the population aged 5 and over are now being educated in these schools as compared with 615,415 pupils or 1·9 per cent of the population of that age in 1911. Amongst the boys' schools the increase in middle English schools is greater both absolutely and proportionately than in the case of middle vernacular schools, a fact which indicates a preference for English education. The number of girls attending public schools is about double what it was in 1911. One boy out of every 9 aged 5-15, and one girl out of every 81 of that age was in 1921 receiving education in a primary school. In the number of private schools and of attendance of pupils there has been a steady decrease due to a conversion into public institutions of schools teaching Arabic or Persian, Sanskrit, the vernacular or the Koran. The increase in the number of other schools not conforming to departmental standards is due to the opening of the so-called "national schools"; the returns relating to these schools are not reliable, but it was estimated that in March 1921 they were 250 in number and were providing education to 10,000 pupils.

13. The circulation of newspapers and periodicals affords some evidence of the developing literacy of the people and their interest in public affairs.

NEWSPAPERS, ETC.

The circulation of newspapers, of which details are given in Subsidiary Table VIII, has approximately doubled at every census since 1891: the number and circulation of periodicals has increased three-fold in the last decade. The weekly paper is the most common form in Bihar and Orissa; there are 13 Oriya, 12 Hindi and 9 English weeklies which represent about three-quarters of the total newspapers issued in the province. Of the 49 periodicals issued 39 are monthlies and 24 are in Hindi. The total number of newspapers and periodicals issued is 96 and the total circulation 56,770.

SUBSIDIARY TABLE I.—EDUCATION BY AGE, SEX AND RELIGION.

RELIGION.	NUMBER PER MILLE WHO ARE LITERATE.												NUMBER PER MILLE (AGED 5 AND OVER) WHO ARE ILLI- TERATE.			NUMBER PER MILLE (AGED 5 AND OVER) WHO ARE LITERATE IN ENGLISH.		
	ALL AGES (5 AND OVER).			5-10.		10-15.		15-20.		20 AND OVER.		Persons.	Males.	Females.	Pers.ms.	Males.	Females.	
	Persons.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
ALL RELIGIONS ...	51	96	6	18	3	70	8	111	10	126	7	949	904	994	4	8	0.5	
Hindu ...	53	101	6	19	3	74	7	118	10	131	6	947	899	904	4	7	0.1	
Muhammadan ...	53	99	8	18	4	67	13	160	13	134	8	947	901	903	6	11	0.3	
Christian ...	131	180	83	50	50	157	90	239	105	330	86	869	830	917	54	73	35	
European, etc., Christians ...	987	909	942	...	...	...	...	...	...	...	...	43	31	63	904	939	855
Indian Christians ...	100	145	66	...	...	...	...	...	...	...	...	900	855	944	29	35	10
Brahmo ...	615	690	536	673	441	629	684	654	688	706	508	335	310	474	329	377	265	
Animist ...	6	12	1	2	0.4	9	1	16	1	17	0.4	394	388	399	0.4	1	0.04	
Arya ...	256	234	77	179	57	367	125	567	169	471	63	744	576	923	48	80	3	

SUBSIDIARY TABLE II.—EDUCATION BY AGE, SEX AND LOCALITY.

DISTRICT AND NATURAL DIVISION.	NUMBER PER MILLE WHO ARE LITERATE.										
	ALL AGES (5 AND OVER.)			5-10.		10-15.		15-20.		20 AND OVER.	
	Persons.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
	2	3	4	5	6	7	8	9	10	11	12
1											
BIHAR AND ORISSA ...	51	96	6	18	3	70	8	111	10	126	7
NORTH BIHAR ...	45	86	5	18	3	65	6	102	8	111	5
Saran ...	49	98	6	17	2	71	5	115	9	126	6
Champan ...	35	65	4	12	2	49	5	74	8	83	4
Muzaffarpur ...	45	87	7	18	4	66	8	96	11	112	7
Darbhanga ...	48	93	5	23	3	73	5	107	7	117	5
Bhagalpur ...	56	106	5	19	2	77	7	146	9	136	5
Purnea ...	36	66	3	17	2	51	4	75	4	84	2
SOUTH BIHAR ...	66	123	9	27	5	105	11	150	13	151	9
Patna ...	98	174	16	45	10	154	21	218	26	204	16
Gaya ...	59	111	8	26	4	93	8	133	11	138	8
Shahabad ...	56	103	6	19	2	87	6	133	10	136	6
Monghyr ...	56	106	7	21	4	101	10	135	10	132	6
ORISSA ...	79	160	9	23	4	92	12	155	15	220	9
Cuttack ...	83	171	9	25	5	104	12	172	15	235	9
Balasore ...	82	164	8	24	4	88	12	144	13	236	8
Puri ...	68	132	10	15	4	70	11	132	16	184	10
CHOTA NAGPUR PLATEAU ...	39	72	6	13	3	48	7	85	10	97	6
Hazaribagh ...	35	66	4	13	2	46	5	79	6	91	5
Ranchi ...	40	72	9	14	5	53	12	90	14	98	8
Palamau ...	32	61	3	11	2	40	3	78	5	80	4
Manbhum ...	59	106	8	31	5	77	8	113	10	135	9
Singbhum ...	45	81	9	19	5	47	8	87	12	111	9
Santal Parganas ...	33	57	0	12	5	43	13	79	16	72	8
Angul ...	30	57	4	5	2	36	6	61	8	80	3
Sambalpur ...	43	83	5	9	2	48	0	102	8	110	5
Orissa States ...	34	65	3	7	1	38	5	75	6	92	4
Chota Nagpur States ...	27	53	3	11	1	36	3	55	4	73	4
CITIES ...	213	326	66	102	43	276	35	407	103	364	62

SUBSIDIARY TABLE III.—EDUCATION BY RELIGION, SEX AND LOCALITY.

DISTRICT AND NATURAL DIVISION.	NUMBER PER MILLE AGED 5 AND OVER WHO ARE LITERATE.									
	HINDU.		MUHAMMADAN.		ANIMIST.		CHRISTIAN.		BUDDHIST.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1	2	3	4	5	6	7	8	9	10	11
BIHAR AND ORISSA ...	101	6	99	8	19	1	180	83	115	11
NORTH BIHAR ...	88	5	76	5	35	6	503	326	262	500
Saran ...	95	5	73	7	...	...	824	857	...	...
Champanan ...	80	7	50	6	...	...	354	151	...	...
Muzaffarpur ...	80	7	60	6	...	...	443	452	...	...
Darbhanga ...	97	5	63	5	...	...	817	732	...	...
Bhagalpur ...	94	5	174	5	104	27	739	806	863	...
Purnea ...	65	2	60	3	6	1	209	221	60	500
SOUTH BIHAR ...	118	7	163	16	20	2	795	563	347	500
Patna ...	168	13	231	23	...	...	950	917	200	1,000
Gaya ...	107	7	144	11	...	...	844	761	833	...
Shahabad ...	103	5	164	14	...	...	268	144	1,000	...
Monghyr ...	104	5	125	11	21	2	935	601	267	...
ORISSA ...	159	8	174	11	8	1	718	687	374	14
Cuttack ...	169	8	205	13	...	...	785	772	406	...
Balasore ...	166	8	136	11	7	1	804	619	...	...
Puri ...	131	9	134	9	61	...	650	545	283	45
CHOTA NAGPUR PLATEAU ...	82	6	104	13	12	0.4	145	52	53	7
Hazaribagh ...	67	4	69	3	7	0.2	665	471	...	...
Ranchi ...	96	8	169	9	14	0.3	130	37	...	...
Palamanu ...	63	3	75	5	6	2	55	14	...	...
Manbhum ...	104	7	128	5	9	2	473	467	74	250
Singbhum ...	111	10	252	46	20	0.5	326	179	...	...
Santal Parganas ...	93	13	71	23	13	0.3	314	74	...	...
Angul ...	71	4	387	92	14	0.3	863	532	...	...
Sambalpur ...	81	4	400	54	9	...	141	82	1,000	...
Orissa States ...	71	4	238	12	6	0.3	55	15	50	5
Chota Nagpur States ...	74	5	216	9	5	0.1	258	80	...	...
CITIES ...	322	57	321	56	18	12	786	713	371	1,000

SUBSIDIARY TABLE IV.—ENGLISH EDUCATION BY AGE, SEX AND LOCALITY.

DISTRICT AND NATURAL DIVISION.	LITERATE IN ENGLISH PER 10,000.													
	1921.										1911.		1901.	
	5-10.		10-15.		15-20.		20 AND OVER.		ALL AGES (5 AND OVER).		ALL AGES (5 AND OVER).		ALL AGES (5 AND OVER).	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
BIHAR AND ORISSA ...	9	3	56	5	135	3	97	5	78	5	47	3	40	2
NORTH BIHAR ...	7	1	49	2	117	5	72	3	61	3	38	2	32	2
Saran ...	8	1	54	2	142	5	87	3	72	3	46	2	41	1
Champanan ...	4	1	38	2	74	4	54	3	44	2	25	1	27	1
Muzaffarpur ...	6	1	42	2	118	5	73	3	62	3	40	2	45	2
Darbhanga ...	8	3	50	3	110	5	66	3	66	3	35	2	17	2
Bhagalpur ...	13	1	80	3	206	4	113	5	96	4	54	2	27	1
Purnea ...	4	0.5	27	2	54	5	38	2	32	2	25	2	35	3
SOUTH BIHAR ...	13	4	76	3	184	11	123	7	102	7	64	5	57	4
Patna ...	32	13	158	31	383	39	237	18	266	20	118	12	10	10
Gaya ...	10	3	51	4	121	5	62	3	68	3	37	1	37	1
Shahabad ...	9	1	72	2	193	4	113	2	95	3	69	2	62	2
Monghyr ...	8	3	46	2	102	3	77	5	61	6	47	6	36	4
ORISSA ...	10	2	73	9	183	10	128	5	105	5	59	4	44	2
Cuttack ...	11	3	67	14	316	13	142	5	118	7	65	4	53	3
Balasore ...	9	1	65	3	125	5	109	4	87	3	52	3	35	1
Puri ...	9	2	63	5	174	8	120	5	97	5	48	4	35	2
CHOTA NAGPUR PLATEAU ...	3	3	46	4	110	8	101	7	75	6	43	3	34	3
Hazaribagh ...	7	2	49	5	105	6	105	6	75	5	51	3	41	4
Ranchi ...	10	2	72	8	165	16	120	10	93	8	67	3	33	2
Palamanu ...	2	1	26	1	73	1	54	3	41	2	32	6	21	0.3
Manbhum ...	24	12	83	10	172	12	203	18	180	15	78	8	50	1
Singbhum ...	26	11	80	12	313	27	279	30	191	23	65	8	38	5
Santal Parganas ...	6	1	40	4	86	9	67	3	53	3	48	3	25	3
Angul ...	1	1	22	1	43	3	61	2	42	1	22	1	11	0.3
Sambalpur ...	5	3	53	2	138	3	73	3	65	3	32	2	...	...
Orissa States ...	2	0.5	21	1	68	2	45	1	34	1	15	1	...	...
Chota Nagpur States ...	4	...	38	...	60	...	66	2	46	1	38	1	...	...

SUBSIDIARY TABLE V.—PROGRESS OF EDUCATION SINCE 1881.

DISTRICT AND NATURAL DIVISION.		NUMBER OF LITERATE PER MILE.																						
		ALL AGES, 10 AND OVER.											15-30.						20 AND OVER.					
		Males.					Females.						Males.			Females.			Males.			Females.		
		1901.	1911.	1921.	1891.	1881.	1921.	1911.	1901.	1891.	1881.	1921.	1911.	1901.	1921.	1911.	1901.	1921.	1911.	1901.	1921.	1911.	1901.	
		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23		
BIHAR AND ORISSA ..		114	104	104	99	78	7	5	4	2	3	111	103	96	10	7	4	196	114	130	7	4	3	
NORTH BIHAR		102	98	89	85	62	6	4	2	1	2	102	98	89	8	6	3	111	105	98	5	4	2	
Saran		115	105	102	89	68	6	3	3	2	2	115	114	89	9	5	3	120	114	118	0	3	3	
Champaran		74	65	59	53	39	5	3	1	1	1	74	65	55	8	5	3	83	74	67	4	3	1	
Muzaffarpur		102	96	104	112	98	8	6	4	2	2	96	96	100	11	9	5	112	103	115	4	3	2	
Darbhanga		109	110	105	88	68	5	4	3	1	1	107	111	111	7	6	3	117	118	90	5	4	3	
Bhagalpur		127	104	89	77	50	6	4	2	1	2	126	107	89	9	6	3	136	110	96	5	4	3	
Purnea		73	67	75	82	67	3	3	2	1	3	75	89	72	4	4	3	84	100	81	2	3	1	
SOUTH BIHAR		143	125	108	105	87	9	6	4	3	5	150	134	106	13	10	5	151	133	116	9	6	4	
Patna		198	164	154	139	133	18	11	7	5	18	218	181	163	26	18	9	204	171	159	16	10	7	
Gaya		120	114	114	96	82	8	5	3	2	1	133	123	91	11	7	3	133	123	100	8	5	3	
Shahabad		128	124	114	95	76	6	5	4	2	2	138	138	106	10	8	5	136	120	121	6	5	4	
Monghyr		126	103	77	54	63	7	5	3	3	3	125	106	79	10	8	4	132	115	80	0	4	2	
ORISSA		187	170	196	144	147	10	7	5	3	4	155	159	176	15	10	7	220	194	215	9	6	5	
Cuttack		216	179	201	157	141	10	7	6	4	2	172	163	183	15	10	7	235	203	210	9	6	5	
Balasore		180	180	244	136	168	9	6	5	4	2	144	162	182	13	10	7	220	210	232	8	5	5	
Puri		166	143	170	127	137	11	6	5	3	8	132	127	164	16	10	7	184	163	108	10	6	5	
CHOTA NAGPUR PLATEAU		86	75	73	57	56	7	4	5	2	2	85	75	64	10	6	4	97	83	78	6	4	3	
Hazaribagh		80	80	71	67	48	5	4	3	3	3	79	69	77	6	6	3	91	67	78	5	4	2	
Ranchi		87	82	74	40	45	10	9	6	4	2	90	81	70	14	11	8	98	91	86	8	7	5	
Palamu		73	45	53	4	4	3	78	48	49	...	5	8	2	80	48	90	4	4	2
Manbhum		123	113	101	78	87	9	6	4	1	2	113	116	92	10	9	6	135	120	113	9	6	4	
Singbhum		95	72	64	56	50	10	5	3	3	2	87	73	58	13	6	4	111	70	73	9	5	3	
Santal Parganas		95	67	65	45	61	10	4	3	1	3	78	66	66	16	5	4	73	67	71	8	4	3	
Angul		69	57	53	37	55	4	3	1	1	1	61	60	47	8	4	2	80	71	59	3	2	1	
Samtalpur		98	76	...	...	...	5	3	...	...	...	102	81	45	8	5	3	110	83	55	5	4	3
Orissa States		70	62	...	...	...	4	3	...	...	...	75	57	...	8	4	...	92	70	...	4	3	...
Chota Nagpur States		68	70	...	...	...	4	3	...	...	...	55	56	...	4	2	...	73	65	...	4	4	...

SUBSIDIARY TABLE VI.—EDUCATION BY CASTE.

CASTE.	NUMBER PER 1,000 AGED 5 AND OVER WHO ARE LITERATE.						NUMBER PER 10,000 AGED 5 AND OVER WHO ARE LITERATE IN ENGLISH.					
	1921.			1911.			1921.			1911.		
	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.
1	2	3	4	5	6	7	8	9	10	11	12	13
Anglo-Indian	944	919	971	1,002	964	1,010	9,070	8,964	9,186	9,827	9,809	9,567
Babhan	139	249	23	114	210	16	70	134	3	17	34	0'04
Bhniya	7	13	1	9	19	1	1	2	0'2	4	8	0'4
Brahman	180	339	21	190	358	20	149	291	9	22	176	7
Chamar	5	10	1	4	8	3	1	2	0'2	0'5	1	...
Chasa	41	84	3	34	68	2	3	16	0'2	2	4	0'03
Gaura	20	40	1	15	31	1	4	8	0'1	1	3	...
Goala	15	29	1	14	27	1	6	11	2	3	5	0'1
Jolaha	31	58	7	23	40	3	26	49	4	9	17	2
Karan	283	550	63	287	553	42	381	829	10	221	456	3
Kayasth	385	657	95	375	680	63	941	1,771	57	622	1,209	21
Khandait	87	179	8	79	161	5	29	63	1	19	40	0'2
Ketri	29	57	2	25	49	1	7	14	0'2	3	6	0'1
Kurmi	44	85	3	35	68	1	12	23	1	5	9	0'1
Munda (Hindu)	14	25	1	25	47	2	2	4	...	4	6	0'3
Do. (Animist)	6	12	1	6	12	1	2	4	1	2	4	...
Musahar	2	3	1	1	2	0'3	1	1	0'1	0'4	0'8	...
Oron (Animist)	7	14	1	6	10	1	3	5	1	1	2	0'3
Pan (Hindu)	9	17	0'5	7	13	0'3	1	2	0'3	0'9	2	...
Do (Animist)	2	4	...	4	8	0'3	...	...	...	...	...	...
Rajput	124	231	10	103	197	6	165	293	2	25	50	0'4
Santal (Hindu)	8	15	0'4	5	9	0'5	2	4	0'2	0'5	1	...
Do. (Animist)	4	8	1	4	13	0'3	2	4	1	0'8	2	...
Tanti	23	44	1	18	38	1	5	11	0'2	3	7	0'2
Teli	54	108	3	45	89	1	13	26	0'4	4	9	0'3

SUBSIDIARY TABLE VII.—NUMBER OF EDUCATIONAL INSTITUTIONS AND PUPILS (BRITISH TERRITORY ONLY) ACCORDING TO THE RETURNS OF THE EDUCATION DEPARTMENT.

CLASS OF INSTITUTION.	1921.		1911.		1901.		1891.	
	No. of institutions.	No. of pupils.	No. of institutions.	No. of pupils.	No. of institutions.	No. of pupils.	No. of institutions.	No. of pupils.
1	2	3	4	5	6	7	8	9
BIHAR AND ORISSA	28,129	828,619	27,231	715,398	23,091	478,194	24,304	449,147
A.—Public Institutions	26,255	784,860	25,583	671,970	17,886	430,141	18,747	402,370
COLLEGIATE EDUCATION	14	2,593	11	1,311	11	950	7	468
Arts Colleges For males	9	2,200	7	1,261	7	855	4	400
„ females	1	393	4	450	4	95	3	68
Law Colleges	3	287	3	405	4	85	3	68
Training Colleges	1	37	1	11	...	...	...	...
SCHOOL EDUCATION—GENERAL	25,804	769,102	23,148	659,220	17,722	424,979	18,645	399,774
High English Schools For males	113	25,285	91	22,325	87	18,000	65	14,701
„ females	4	651	2	255	1	33	...	...
Middle English Schools For males	261	22,155	182	14,584	151	9,112	136	8,544
„ females	12	1,016	4	396	...	...	...	...
Middle Vernacular Schools For males	155	11,515	130	8,907	153	7,817	159	8,113
„ females	11	1,310	9	616	7	412	6	200
Primary Schools For males	29,591	644,297	21,362	577,742	16,917	378,065	17,719	356,363
„ females	2,649	62,479	1,372	34,659	506	10,539	557	11,763
SCHOOL EDUCATION—SPECIAL	437	13,165	424	11,439	153	4,212	95	2,128
Training Schools For males	127	2,713	115	1,923	8	200	...	...
„ females	8	184	10	67	1	12	...	...
Medical Schools	2	338	2	223	2	246	...	...
Engineering and Surveying Schools	3	163	3	250	3	207	...	...
Technical and Industrial Schools For males	27	980	36	533	16	347	...	...
„ females	8	233	...	...	...	...	...	...
Commercial Schools	7	170	2	29	...	...	95	2,128
Agricultural Schools For females	1	86	...	...	...	...	...	...
Reformatory Schools	1	410	1	427	1	204	...	...
Madrasahs	12	669	7	630	5	375	...	...
Recognized Sanskrit tols	233	6,523	213	5,723	114	2,424	...	...
Miscellaneous Schools For males	2	125	32	1,255	3	157	...	...
„ females	1	253	...	...	...	...	...	...
B.—Private Institutions.	1,874	43,159	3,648	43,428	5,205	48,053	5,557	46,777
Advanced, teaching Arabic or Persian	120	3,037	473	5,919	992	19,317	684	9,543
Ditto Sanskrit	91	1,250	365	3,839	640	6,569	654	10,974
Elementary, teaching vernacular only For males or mainly.	1,096	17,610	2,370	26,047	3,126	25,733	3,343	22,417
„ females	30	637	10	391	15	425	...	...
Elementary, teaching the Koran For males	122	1,732	245	3,130	371	4,123	239	2,397
„ females	3	27	7	82	3	18	...	...
Other schools not conforming to departmental standards. For males	403	13,607	106	3,643	49	869	167	1,541
„ females	4	113	6	373	...	...	...	...

SUBSIDIARY TABLE VIII—NUMBER AND CIRCULATION OF NEWSPAPERS AND PERIODICALS.

Language.	Class of newspaper or periodical (daily, weekly, etc.).	1921.		1911.		1901.		1891.	
		Number.	Circulation.	Number.	Circulation.	Number.	Circulation.	Number.	Circulation.
1	2	3	4	5	6	7	8	9	10
NEWSPAPERS ...	.....	47	33,520	28	13,577	14	3,450	17	4,350
BHĀGALĪ ...	Weekly ...	2	250	3	1,300	1	600		
ENGLISH ...	.....	14	11,400	9	3,527	4	4,000	Not available.	
	Daily ...	1	500	...	...	...	...
	Tri-weekly ...	1	1,000	...	...	...	...
	Bi-weekly ...	...	...	...	...	1	400		
	Weekly ...	9	5,600	6	2,010	2	3,100		
	Fortnightly ...	3	4,300	...	...	1	500		
	Monthly ...	...	...	2	1,017	...	...
	Four-monthly ...	...	...	1	500	...	...
HINDI ...	.....	15	12,350	8	4,050	3	1,500	3	1,900
	Tri-weekly ...	1	1,000	...	...	...	...
	Weekly ...	12	10,150	5	2,300	1	500	2	1,700
	Fortnightly ...	2	1,200	1	1,250	1	500		
	Monthly ...	...	...	2	500	1	500	1	300
ORĪYĀ ...	.....	13	9,320	6	3,600	4	1,600	10	2,050
	Weekly ...	13	9,320	6	3,600	4	1,600	4	1,050
	Monthly ...	...	...	...	...	...	...	6	1,000
URDŪ ...	Weekly ...	3	200	2	1,100	2	750	4	00
PERIODICALS ...	.....	49	23,250	16	7,700	4	1,300	6	1,750
BHĀGALĪ ...	Monthly ...	1	300	1	200	...	...	...	...
ENGLISH ...	.....	13	6,820	4	2,350	1	350	...	...
	Monthly ...	6	4,400	4	2,350	1	350	...	...
	Quarterly ...	6	1,220	...	...	...	...	...	...
	Annually ...	1	500	...	...	...	...	...	...
HINDI ...	.....	24	11,300	8	3,550	2	450	6	1,750
	Bi-monthly ...	...	...	...	...	...	...	1	350
	Monthly ...	22	8,800	7	3,250	2	450	4	1,350
	Quarterly ...	2	2,500	1	300	...	...	1	250
ORĪYĀ ...	.....	6	2,630	3	1,600	...	...	...	...
	Monthly ...	5	2,030	3	1,600	...	...	...	...
	Quarterly ...	1	600	...	...	...	...	...	...
URDŪ ...	Monthly ...	5	2,200	...	...	1	500	...	...

CHAPTER IX.

LANGUAGE.

In column 13 of the census schedule the enumerators were directed to "enter the language which each person ordinarily speaks in his own home", the language of the mother being recorded in the case of infants and deaf-mutes. The question

INTRODUCTORY.

related solely to the language ordinarily spoken in the person's own home and not the written language or the language ordinarily spoken, for instance, in the course of his business or his profession. In accordance with these instructions a clerk who for half the day writes, speaks and even thinks in English with regard to his professional duties will, provided he speaks Hindi when he returns in the evening to the bosom of his family, be returned as a speaker of Hindi: a Santal or Oraon emigrant whose work takes him to a place where nothing but Hindi or Bengali is spoken will, provided he speaks his tribal language in his native village, be entered as a speaker of that language: an Englishman, living away from his fellow-countrymen where there is no one to whom he can speak English from one week to the next, will nevertheless be returned as an English speaker. The results of tabulating the entries found in this column are exhibited in Imperial Table X, while at the end of the chapter are given the following Subsidiary Tables:—

Subsidiary Table I.—Distribution by language of the population of the province.

Subsidiary Table II.—Distribution by language of the population of each district.

Subsidiary Table III.—Comparison of caste and language tables.

2. The classification of the languages spoken in the province has been made in accordance with the scheme of the Linguistic Survey of India which divides the languages of India into four families with an equipment of 50 sub-families, branches, sub-branches and groups. Of these four families—the Austric, the Tibeto-Chinese, the Dravidian, and the Indo-European—the Tibeto-Chinese languages are hardly spoken in this province, but all the other three are important: over 34½ million persons speak one or other of the Indo-European languages, over 2½ millions speak some language of the Austric family and over 700,000 speak a Dravidian language. In exhibiting the language statistics for the province it is unnecessary to set out the full scheme of families, sub-families, branches, sub-branches and groups in which the languages of India have been classified: provided it is in accordance with the all-India classification, a modified and abbreviated classification is sufficient, and an abbreviated classification of this description has been utilized in Table X. The following statement shows how the languages have been grouped in that table. The term "Aryan" has, it will be noticed, been used instead of the term "Indo-European", the Aryan being a sub-family of the Indo-European family which, so far as India is concerned, is coextensive with it. As the term Aryan is shorter and more familiar than the term Indo-European, as it has for practical purposes the same meaning and was used at previous censuses, it has been used again on the present occasion. The Munda group of languages forms a branch of the Austro-Asiatic sub-family of the Austric family: as all languages of the Austric family spoken in Bihar and Orissa

belong to this branch it is convenient to use the name of the branch instead of that of the family :—

A.—LANGUAGES OF INDIA.

(1) Aryan languages.	(2) Munda languages.	(3) Dravidian languages.	(4) Other languages.
1. Hindi and Urdu.	1. Agaria.	1. Gondi.	1. Bhotia.
2. Oriya.	2. Asuri.	2. Kandhi.	2. Gipsy dialects.
3. Bengali.	3. Bhumij.	3. Malhar.	3. Others.
4. Banjari.	4. Birhar.	4. Malto.	
5. Gujrati.	5. Brijia.	5. Oraon.	
6. Kachhchi.	6. Ho.	6. Tamil.	
7. Marathi.	7. Juang.	7. Telugu.	
8. Marwari.	8. Karmali.		
9. Naipali (Khas-kura).	9. Kharia.		
10. Panjabi.	10. Kora.		
11. Pashto.	11. Korwa.		
	12. Mahili.		
	13. Mundari.		
	14. Santali.		
	15. Singli.		
	16. Turi.		

B.—ASIATIC LANGUAGES FOREIGN TO INDIA.

1. Arabic.
2. Chinese.
3. Others.

C.—EUROPEAN LANGUAGES.

1. English.
2. Others.

3. Before discussing the languages in detail a few of the difficulties that were experienced in compiling the statistics may be explained. The instructions were quite simple and no difficulty seems to have been experienced in getting the enumerators to fill in the schedules correctly except in the one or two doubtful cases which will be mentioned presently. It was at one time feared that in connexion with the agitation for the amalgamation of the Oriya-speaking tracts an effort might be made to exaggerate the number of Oriya speakers in Singhbhum; but no difficulty was experienced on this account and there is no reason to suppose that the statistics were affected by political considerations. Such difficulties as occurred in connexion with the language statistics occurred at a later stage when doubtful and obscure entries had to be classified. In disposing of these difficulties the index of language names recently issued by the Linguistic Survey of India, a copy of which was supplied to each Deputy Superintendent, was constantly referred to and proved of the greatest assistance.

4. One of the entries that caused much trouble throughout the province, although fortunately it was not one that was very numerous, was "Farsi".

Properly speaking Farsi means Persian, but it was quite clear that the term was not always used in that sense. Most commonly it was used, especially in Orissa, for Urdu which contains many Persian words: but it would not have been safe to treat all Farsi entries as Urdu because there was always the fear of overlooking cases of genuine Persian speakers. Also the word is sometimes used as an honorific title for the Hindi spoken by members of tribes who have abandoned their tribal languages. In doubtful cases therefore it was necessary to look into the slips and classify the Farsi according to the caste and birth-place of the persons. Such an inspection usually proved that, whatever Farsi might be, it was not Persian, and it was usually classified as Hindi or, in the case of Muhammadans, as Urdu.

5. Confusion is again often apt to arise between Oriya and Oraon. An unusual number of Oriya speakers were at first reported from Palamau amongst the Christians and from Purnea. The former were proved without difficulty to be Oraon speakers and so eventually were many of the latter though the word Oriya was actually traced back to the schedules, the enumerators apparently being under the impression that the Oraons speak Oriya. In other cases in Purnea Oriya on further inspection proved to be merely Urdu.

6. The word Kol, as usual, was a source of difficulty in connexion with the classification of both caste and language. In the Provincial Census Code it was described as "a name commonly given to various non-Aryan languages. In Palamau it means Oraon, and in the Santal Parganas, Hazaribagh and Manbhum the Karmali dialect of Santali. In Balasore, Singhbhum, and the Orissa States it is used for Ho. Elsewhere it means Oraon or Mundari if spoken by Oraons or Mundas respectively". Considerable discretion had therefore to be used in classifying the entry and no assistance was usually forthcoming from the caste entry on the slips, for where the language was Kol the caste was usually Kol also. The greatest number of Kols were returned from Mayurbhanj (85,784) and Keonjhar (46,454) States which adjoin the Kolhan: they were also fairly numerous in Bonai (5,142) which also adjoins the Kolhan and Bamra (3,972) which adjoins Bonai. In all these cases they were treated as Hos both by caste and language. A considerable number of persons in the Santal Parganas (1,667) also returned their language as Kol and in that case it was classified as Santali.

7. Another troublesome entry was Kurmali. Kurmali is a form of Santali and is practically confined to the Santal Parganas but Kurmali or Kurumali, which is properly speaking the language of the aboriginal Kurmis of the Chota Nagpur Plateau, was constantly found in the slips. The marginal statement

DISTRICT OR STATE.	Number of Kurmali slips.
Manbhum ...	49,675
Singhbhum ...	4,035
Ranchi ...	12,823
Mayurbhanj ...	37,672
Nilgiri ...	50
Keonjhar ...	30
Gangpur ...	325
Bonai ...	510
Saraikela ...	639
Kharsawan ...	3,136
TOTAL ...	108,895

shows the number and distribution of persons returned as speaking this language. In the index of languages it is described as a form of Eastern Magahi which is a dialect of Bihari, *i.e.*, Hindi, and it was therefore classified as Hindi. The census officer of Mayurbhanj State reported that he found a number of Kurmis whose language ten years ago had been Kurmali speaking some of them Hindi and some of them Bengali in their own homes.

8. A great deal of trouble was experienced over speakers of "Khotta" in Manbhum. This term is used to denote a mixture of Hindi and Bengali which is commonly spoken in the district and in which the admixture of Hindi or Bengali varies according to locality: towards the borders of Hazaribagh and Ranchi Hindi predominates, while Bengali predominates towards Burdwan and Bankura. In 1911 Khotta was treated as Hindi but on the present occasion it was originally treated as Bengali, and only an incomplete record was kept of the number of slips so classified. The boxes therefore of the areas in which Khotta had been found in any numbers in 1911 were searched again with the result that eventually 24,520 speakers of Khotta were found and transferred to Hindi. It is impossible to say that Khotta is either Hindi or Bengali, but as it was treated as Hindi in 1911 it was thought better on the whole to treat it as such again on the present occasion.

9. Another term that always causes trouble is Kora or Koda. Kora is used as the name of a number of different tribes and really means little more than earthworker; their language is often described as Kora. In Sambalpur over 22,000 people were entered as speaking Kora, but in this district the Kora language is really Oraon and was classified as such. The same is the case in Bamra.

where rather over 20,000 Kora speakers were found and Bonai and Gangpur which together accounted for 14,500 others. In the other states also where the Kora language was found it was classified as Oraon except in Mayurbhanj (25) where it was classified as Mundari and Nilgiri (496) where it was classified as Santali; but except in Bamra, Bonai and Gangpur the entries were not numerous. Kora is however also recognized as a separate dialect of Kherwari (*i.e.* the main Munda language which includes Mundari and Santali) and was eventually treated as a separate language for the purposes of Table X in the three districts other than Sambalpur, *i.e.* the Santal Parganas, Balasore and Manbhum, in which it was found.

10. In North Bihar 98·7 per cent. and in South Bihar 99·6 per cent. of the population speak Hindi or Urdu; in Orissa 95·8 per cent. of the population

LOCAL DISTRIBUTION OF LANGUAGES. speak Oriya. In these divisions there is only one language that counts and the linguistic distribution is as flat and devoid of variety as is the landscape—facts which are connected as effect and cause, for languages naturally spread more rapidly where there is no physical hindrance to the free movement of the people who speak them. From the fastnesses of the Chota Nagpur Plateau on the other hand a babel of tongues arises to this day. The three main Aryan languages—Hindi, Oriya and Bengali—have now absorbed nearly three-quarters of the population: but from the linguistic point of view Chota Nagpur is still a home of flourishing, lost causes and the remaining quarter, which consists principally of speakers of Munda or Dravidian languages, makes up in variety for any shortness of numbers and accounts for more than half the seven pages to which Table X runs in this province. In the maps of the Linguistic Survey Chota Nagpur is marked by a series of coloured patches, each of which represents the area in which some language has survived. The three most striking of these islands of colour are those in which the three principal Dravidian languages are found. The first of these is in the north-east corner of the Santal Parganas, where the Ganges swings round the shoulder of the hills at Rajmahal: as the hills have withstood the river so has the Malto language of the Sauria Paharias who inhabit them stood out above the flood of Aryan languages which has poured round their foot. The second and the largest of the three islands is that of the Oraon speakers, *i.e.*, roughly Ranchi, Palamau and Sambalpur districts and the states of Gangpur, Bonai and Bamra. The third is that of the Kandhs, *i.e.*, the Khondmals subdivision of Angul and its immediate neighbourhood. The patches which represent the Munda languages are larger and less conspicuously isolated. According to the anthropologist there is no fundamental difference between the people who speak the Munda and Dravidian languages, all of whom appear in spite of considerable variations of physical type to belong to the same stock; but philologists generally are of opinion that the Dravidian and Munda languages are fundamentally dissimilar, and that there is “no philological reason for deriving them from the same original”*: the Dravidian languages are akin to the languages of southern India while the Munda languages have affinities with those of further India and the Malay Peninsula. The probable explanation of this unity of race and diversity of language is thought to be that an original Dravidian stock at some remote date received an admixture of blood from the ancestors of the tribes which are now found in further India and of the mixed offspring some continued to speak the Dravidian tongue, while others adopted a Munda language. In any case the result is that the Chota Nagpur Plateau is a place of linguistic survivals and a happy hunting ground for the comparative philologist. In the following paragraphs the languages are discussed in the order in which they appear in Table X.

ARYAN LANGUAGES.

11. The most common language in the province is Hindi or Urdu which is spoken by two-thirds of the population. In North and South Bihar it is practically universal; in Orissa it is spoken by 3 out of every 100. The language spoken is not really Hindi in the eye of the

* Sir G. A. Grierson's Introduction to Volume IV of the Linguistic Survey of India.

Linguistic Survey but Bihari, "a language of the Eastern Group of the Outer Sub-Branch of the Indo-Aryan Language". It is however commonly referred to as Hindi and is described as such in Table X. It has three principal dialects, Maithili which is spoken in North Bihar excluding Saran and Champaran, Magahi which is spoken in South Bihar excluding Shahabad, and Bhojpuri which is spoken in the line of districts that form the western fringe of the province from Champaran to Palamau. Considerable interest was displayed at this census in the Maithili dialect, and letters were received from the Maithil Mahasabha of Darbhanga and the Shree Dharmamrita Vaishini Sabha of Bhagalpur suggesting that Maithili should be entered in the census schedules as the language of persons residing in the Maithili area. If an accurate return of Maithili speakers could be obtained through the agency of the census staff it would be of great interest, but it is doubtful if the enumerator or the person enumerated could be relied upon to distinguish exactly where the Maithili dialect began and where it ended: in fact even an experienced philologist acquainted with the peculiarities of each dialect would find it difficult to draw the line on the boundary for instance of the Maithili and Bhojpuri country. On the other hand to accede to the requests made and to substitute the word Maithili for the word Hindi in the schedules in certain areas would have produced the same numerical result as to enter the language as Hindi and then record that Hindi is spoken in those areas in the Maithili dialect, as has actually been done. It is known where the Maithili dialect is spoken and sufficiently accurate statistics can be obtained on the basis of locality: a calculation of the number of speakers of the three dialects has been made on this basis on the same lines as at previous censuses, the only difference being that the figures relate entirely to the actual population of Bihar and Orissa. According to this calculation the number of Maithili speakers is 10,272,711, of Magahi speakers 5,327,553 and of Bhojpuri speakers 6,826,900.*

12. Ten years ago Muhammadans were strongly averse from having their language recorded as Hindi while Hindus objected no less strongly to

the use of the term Urdu in the schedules, and complaints were received that Hindu enumerators were changing entries of Urdu into Hindi: considerable feeling was engendered and the number of Urdu speakers in Bihar and Orissa jumped from 33,290 in 1901 to 387,621 in 1911. On the present occasion no special interest was displayed in this question and the number of Urdu speakers fell to 293,638: there were increases in the Tirhut and Chota Nagpur Divisions, but a big decline in the Patna Division, particularly in Gaya where the number fell from just over 90,000 to just under 18,000. The proportion of Urdu

speakers to the Muhammadan population is shown on the margin from which it will appear that the proportion is far higher in Orissa than elsewhere. It is naturally easier to preserve the purity of the Urdu language in a land of Oriya speakers than in a land of Hindi speakers where there is a constant tendency to lapse into the idioms of the local dialects: the Urdu of Orissa however is generally written in the Oriya and not in the Persian character. The truth is that

the boundary between Hindi and Urdu is an impossible one to draw with any degree of definition in this province. The language spoken by Hindus and many Muhammadans is really the same, though the latter may use an

LOCALITY.	Urdu speakers per cent. of Muhammadans.
Patna Division ...	123.2
Tirhut Division ...	96.9
Bhagalpur Division ...	22.7
Orissa Division ...	458.6
Chota Nagpur Division ...	54.6

* The calculation is as follows:—

Maithili includes persons enumerated in Bihar and Orissa who were born in (1) Darbhanga and Bhagalpur, (2) 6/7 Muzaffarpur, (3) 1/2 Monghyr, and (4) 2/3 Purnea; also 4/5 of the Hindi and Urdu speakers, in the Santal Parganas.

Magahi includes persons enumerated in Bihar and Orissa who were born in (1) Patna and Gaya, (2) 11/12 Hazaribagh, (3) 1/2 Monghyr, (4) 2/3 Malda, and (5) 1/13 Ranchi and Palamau: also 1/5 of the Hindi and Urdu speakers in the Santal Parganas, 5,378 in the Chota Nagpur States and 7,500 persons in the Orissa States.

Bhojpuri includes persons enumerated in Bihar and Orissa who were born in (1) Saran, Champaran and Shahabad, and (2) 1/3 Palamau and Ranchi, in addition to 91,548 immigrants from districts of the United Provinces where Bhojpuri is spoken, viz., Gorakhpur, Basti, Azamgarh, Benares, Ghazipur, Ballia, 2/3 Mirzapur, 1/6 Jaunpur and 2/7 Fyzabad.

occasional Persian word or phrase, and the great majority of Muhammadans in writing use the ordinary Kaithi script. Somewhere between the local Hindi dialects and the Urdu of the Muhammadans of Bihar comes Awadhi, a dialect of Eastern Hindi and a survival of the Muhammadan court at Lucknow which hardly appeared in the schedules, though according to the Linguistic Survey over 500,000 persons speak it in the province. The difference between Hindi and Urdu being so vague too much importance should not be attached to the statistics of Urdu speakers in Table X.

13. The proportion of Hindi or Urdu speakers to the population is much what it was ten years ago in most of the districts of Bihar. In Purnea it has

greatly increased at the expense of Bengali. The

marginal figures give the number of Hindi and

Bengali speakers in this district at the last three censuses. The fluctuations are caused by the varying treatment of the mixed dialect of Hindi and Bengali commonly referred to as "Kishanganjia" which is described in the index of languages as the

	Difference, 1911-21.	1921.	Difference, 1901-11.	1911.	1901.
Bengali	+ 672,403	1,874,971	- 570,887	1,202,568	1,773,455
Hindi	- 647,013	102,008	+ 657,141	749,018	91,877

equivalent of Siripuria, "a form of the Northern dialect of Bengali spoken in Eastern Purnea", the number of speakers there being estimated at 603,623.

No special instructions were issued as to how this dialect should be returned in the schedules and it was generally entered as Hindi, though ten years ago it was generally entered as Bengali. The Subdivisional Officer explained that in his opinion a pure Hindi speaker would be more at home in this area than a speaker of pure Bengali and that therefore the record of the dialect as Hindi was in his opinion correct. If the entry had been "Kishanganjia" it would have been classified as Bengali in accordance with the index and the classification adopted in 1911, but the entry was "Hindi" and could not simply be changed to Bengali. On the other hand the fluctuations show fairly accurately the number of persons who speak this dialect and that the estimate in the Linguistic Survey is not far wrong; it is spoken in the Kishanganj subdivision except on the borders of Darjeeling and Jalpaiguri where Bengali is spoken and in the eastern half of the Sadr subdivision.

14. In Sambalpur the proportion of Hindi speakers now stands at 5·2 per cent. where ten years ago it stood at 9·5. This reduction in Hindi is

owing to a heavy transfer to Oriya which has

occurred in every police-station in the district. The Deputy Commissioner states that since the court language of the district was changed from Hindi to Oriya in 1905 there has been a steady decrease in the number of Hindi speakers. The Hindi speakers of 1911 were mostly immigrants from the Central Provinces who spoke the Laria or Chattisgarhi dialect: they have now settled down in Sambalpur and gradually taken to the local language which is Oriya, while their children born in the district naturally speak Oriya too. Very few families in the interior of the district now speak anything but Oriya in their homes.

15. In Manbhum there has been a decline in Hindi which, taken with the decline in Santali, exactly accounts for the increase in Bengali. Kurmali

and Khotta combined which were classified as

Hindi account for only 74,195 persons whereas in 1911 they accounted for 211,411: it is clear that there has been a sundering out of Hindi and Bengali from the indeterminate Khotta and that Bengali has come out rather the stronger in the separation. The decline in Hindi speakers has occurred chiefly in the Purulia, Jhalda, Manbazar, and Para thanas, while in Jherria there has been a considerable increase. In Singhbhum on the other hand the number of Hindi speakers has increased from 34,323 to 57,421 and the proportion from 4·9 to 7·6 per cent. This increase is accounted for by the increased immigration of Chattisgarhias from the Central Provinces who have found their way in large numbers to Jamshedpur and formed the greater part of the labour force employed on the construction.

of the Amda-Jamda line. The number and proportion of Oriya and Bengali speakers has increased also, the gain in proportion being at the expense of the Munda languages and especially Santali. In Saraikela the proportionate number of Hindi speakers has dropped to about half what it was but the absolute figures are small. The drop has a good deal to do with the fact that Oriya has been introduced as the court language and that education is largely conducted through the medium of Oriya.

16. The number of Oriya speakers in the province has declined from 7,820,258 to 7,750,646, a loss which is more than accounted for by the actual loss of population in the purely Oriya-speaking districts of the seaboard. In fact outside the coastal districts there has been a general increase of Oriya and the proportion of Oriya speakers to the population of the province has very slightly increased. In Sambalpur the increase amounts to 75,073 or 12·1 per cent. and to 16,228 or 13·0 per cent. in Singhbhum. The causes for the increase of Oriya in Sambalpur at the expense of Hindi have just been explained; the distribution of the Oriya speakers in Singhbhum as well as in the Chota Nagpur States is shown in the following statement :—

Thana, police-station, pir, or State.	No. of Oriya speakers.	Proportion of Oriya speakers per cent. of population.	Thana, police-station, pir, or State.	No. of Oriya speakers.	Proportion of Oriya speakers per cent. of population.
KOLHAN	64,424	23·15	CHAKRADHARPUR ...	24,495	22·16
Chainpur Pir	283	12·04	Kuldiha Pir	496	9·63
Asantalia Pir	294	21·68	Kainua Pir	411	15·53
Ajodhya Pir	1,255	14·55	Gulchera Pir	933	11·23
Sidin Pir	639	15·85	GHATSHILA	40,318	12·67
Chiru Pir	946	18·98	Ghatshila P.S. ...	10,259	10·75
Lota Pir	221	14·69	Jamshedpur P.S. ...	6,134	8·78
Rajabasa Pir	706	14·76	Sakchi P.S. ...	14,550	22·67
Charai Pir	2,347	18·90	Baharagora P.S. ...	8,924	16·32
Barkela Pir	1,427	15·43	Kalikapur P.S. ...	451	1·41
Gumra Pir	9,669	22·52	MANOHARPUR ...	11,428	21·07
Thai Pir	8,340	26·12	Saranda Pir	3,954	22·25
Bharbhariya Pir ...	3,421	23·33	Rela Pir	42	6·73
Lagra Pir	981	20·01	STATES	40,074	26·27
Laigarh Pir	4,126	27·84	Saraikela	28,034	24·33
Anwla Pir	6,507	27·86	Kharsawan	12,040	32·27
Bar Pir	16,199	30·64			
Bantaria Pir	2,874	22·46			
Kotgarh Pir	2,208	26·64			
Jamda Pir	508	31·39			
Latua Pir	328	13·68			
Rengra Pir	568	10·30			

The Oriya speakers are found in the greatest density in the west of the district in Baharagora police-station; from that point a belt of mixed population, which includes a fair proportion of Oriyas, stretches up north and west to the two Chota Nagpur States where the *intelligentsia* are Oriyas and the state records are maintained in Oriya. Further west the large village of Kera which is the headquarters of the Thakur of Kera is purely Oriya and Oriyas are found further west again in the estate of the Thakur of Anandpur. Oriya Goalas are also found in considerable numbers in the *pirs* in the south of the Kolhan, where they have worked their way along the valley of the Baiturni river from the states of Mayurbhanj and Keonjhar. In the areas for which figures were compiled the Oriya speakers nowhere amount to one-third of the population and they only just touch 30 per cent. in two of the *pirs* in the south of the Kolhan; their increase by 13·0 per cent. in the last ten years is very little more than the general rate of increase of the district population, *viz.*, 9·37 per cent.

17. Bengali is spoken by 1,656,990 persons in the province of whom 1,530,111 or 92·3 per cent. are found in the border districts and states of the province on the east from Purnea to Balasore. In 1911 the number was 2,294,944, the difference being accounted for by the Kishanganjia dialect in Purnea being recorded as Hindi on the present occasion. In Bhagalpur also, though the numbers involved are not great, there has been a fairly marked decrease of Bengali

speakers, but generally speaking in Bihar there has been a slight if unimportant increase. In Orissa there has been a decrease, of which the greater part has occurred in Balasore district; the increase has occurred in every thana but is marked in Bhadrakh. In the Chota Nagpur Plateau Bengali shows a big increase of 52,000 in Manbhum which it has gained at the expense of Hindi in the manner already explained and also of Santali; in this district the Santals are apparently in process of losing their tribal language, the loss being fairly generally distributed throughout the district. In Singhbhum also there is an increase of over 14,000 or 13·3 per cent., which is rather more than the general rate of increase of population in the district and nearly half of which is due to a decrease in the number of the Bhumij caste speaking their tribal language. In the Orissa States there is a decrease of Bengali speakers; the decrease in Mayurbhanj, where it is complementary to an increase in the tribal languages, Bhumij and Santali, accounts for the greater part of this. In the Chota Nagpur States it is reported that the Kurmi caste in Saraikela are now speaking Bengali to a large extent.

18. The only dialect of Bengali of which statistics were collected was the Mal Paharia dialect of the Santal Parganas. This is the dialect spoken

MAL PAHARIA.

by the Mal Paharias, who are of much the same stock as the Sauria Paharias but live separate from them and use a corrupt dialect of Bengali which contains little trace of any connexion with Malto. This dialect was returned as the language of 29,841 persons, or 74·6 per cent. of the Mal Paharias enumerated in the district. Ten years ago it was recorded as the language of 34,414 persons or nine-tenths of the tribe; in the Linguistic Survey the number of Mal Paharia speakers is estimated at 27,908. The Deputy Commissioner reports that the divorce of Mal Paharias from Sauria Paharias is not complete and that in the border bungalows of Litipara and Kunjobona in the Pakaur subdivision there are people calling themselves Mal Paharias who speak Malto and intermarry with the Saurias.

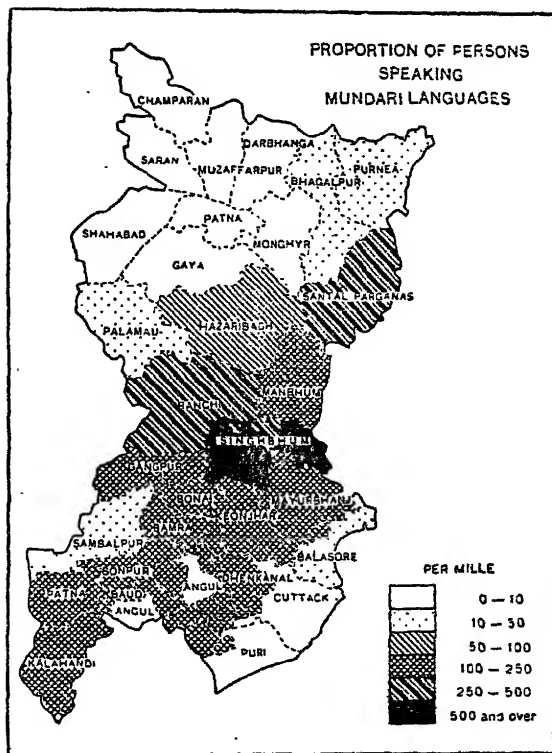
19. The remaining Aryan languages spoken in the province are the languages of sojourners and of no particular importance. Banjari is a dialect

OTHER ARYAN LANGUAGES.

of Rajasthani spoken by the Banjaras, a wandering tribe of traders from Central India who find their way into Sambalpur and the Orissa States: at the present census 4,229 speakers of this language were found. Guzarati is one of the Central Group of Indo-European languages and Kachchhi is a dialect of Sindhi which belongs to the North-Western Group: these languages were spoken by 5,854 and 429 persons respectively, both of which figures are slightly in excess of the figures of 1911 which shows that the habit of migration from Cutch and the Bombay side in order to trade, particularly in Manbhum, Singhbhum and the districts and states of Orissa, is tending to grow. Marathi also, which is spoken in the south of the Bombay Presidency and in the Central Provinces and Berar, shows a slight increase to 1,490, while Marwari, a dialect of Rajasthani which is spoken by the Marwari traders who are a familiar feature of every bazaar, shows a slight decrease and now stands at 17,205. The speakers of Naipali who have increased from 2,631 to 4,498 are found chiefly in Champaran and the districts in the north of Bihar which march with Nepal but they are also found in increasing numbers in Chota Nagpur where they find employment in the military police and as peons and darwans in the coal-field and at other industrial centres. The number of Panjabi speakers, though it still only amounts to 2,893, has doubled in the course of the last ten years: the increase is fairly general but is most marked in Singhbhum where the Panjabi *mistris* of Jamshedpur have raised the district figure from 304 to 1,326. Pashto, the language of the long-limbed traders from the North-West Frontier Province and Afghanistan who are encountered in the most unlikely places and are a regular feature of society in the coal-field, is spoken by 713 persons only, which is almost exactly the figure of 1911. The general effect of these statistics of minor Aryan languages is to show that as the country is opened up and trade and industry develop, distance becomes of less importance and members of communities with a commercial or industrial bent tend to wander further afield in search of congenial employment.

MUNDA LANGUAGES.

20. The distribution by districts of the Munda languages is given in the marginal map.



21. Owing to a contribution of 488 persons from Kalahandi, the Agaria speakers have risen from 112 to 522: 19 per mille of the tribe speak the language and so it still drags out a precarious existence. The Asuri language also is only spoken by 1,735 persons: 763 per mille of the tribe in Ranchi district, where alone it is important, speak the tribal language. In this district the number has sunk to little more than half of what it was in 1911, but the Asurs have decamped in large numbers from the Chainpur thana of Ranchi district into the neighbouring states of the Central Provinces.

22. The number of speakers of the Bhumij dialect is returned as 110,731 or nearly 5,000 more than the number returned in 1911. As regards this language there have been considerable local variations. In Manbhum and Singhbhum together there has been a decline of about 9,000; here the transfer from Bhumij to Bengali is another aspect of the change from Animist to Hindu which has taken place on a large scale in Manbhum and on a smaller scale in Singhbhum outside the Kolhan. The upper ranks of the Bhumij tribe aspire to the status of Rajputs and loss of tribal language naturally follows in the wake of loss of tribal feeling. On the other hand, further off the beaten track in Mayurbhanj State, these disintegrating influences are less strongly felt and there has been an increase of about 23,000 Bhumij speakers which has occurred mostly at the expense of Bengali.

23. Birhar and Brijia have both decreased in the last ten years, Birhar from 1,013 to 258 and Brijia from 1,323 to 768: the estimated numbers of persons speaking these languages according to the Linguistic Survey are 1,234 and 3,000 respectively. It is clear that they hold their lease of life on slender terms; even when he produced Volume IV of the Linguistic Survey nearly twenty years ago Sir George Grierson considered that the days of Birhar were numbered and could make little of the specimens he received of the Brijia dialect which appeared to be that of "such Brijias as have forgotten their own language".

24. The Ho language on the other hand is still full of vitality; both in Singhbhum and the states, of which the most important are Mayurbhanj and Keonjhar, where Kol means Ho, the number of Ho speakers has increased. In Singhbhum to-day where the Kolhan Government estate is the home of the tribe the number of Ho speakers exceeds the number of Hos by 5,000 and in Mayurbhanj and in Keonjhar respectively 996 and 990 per mille of the tribe speak their own.

language. In the province as a whole the Ho speakers number three-quarters of the Ho tribe. The Linguistic Survey which was generally based on the 1891 census gives the number of Ho speakers as 383,126, but there seems to be no reason to doubt the fact that the number of Ho speakers has substantially increased since then.

25. The number of Juang speakers is now 10,531 or 1,782 less than it was ten years ago. The Juang tribe live an isolated existence in the hills and jungles of Keonjhar and Pal Lahara, and a picturesque account of them occurs in Colonel Dalton's work on the Ethnology of Bengal. There is probably no more primitive tribe in the province or in India and the extent to which their tribal customs have been retained may be judged from the fact that they all still speak the Juang dialect, the number of Juangs and Juang speakers being practically identical.

JUANG.

26. Karmali is a dialect of Santali and practically confined to the Santal Parganas. It was returned on this occasion by 11,743 persons in that district as compared with 4,834 ten years ago. Kharia is still widely spoken by 105,731 persons, the very slight decrease that has occurred being practically confined to Gangpur and Bonai States. The language is most important in Ranchi (61,101). It will be noticed that 1,979 Kharia speakers have been returned from Manbhum; in 1911 there were 4,315 speakers of "Kharia thar", but it was classified as Bengali. The figure of 72,172 in the Linguistic Survey seems to be an underestimate. The Kora language has already been referred to in paragraph 9: the number of Kora speakers shown in Table X (3,436, of whom 2,532 come from the Santal Parganas) represents only a small fraction of the total number of persons who returned their language as Kora, most of whom were found in Sambalpur and its neighbourhood and classified as Oraon speakers. Korwa is spoken by 9,173 persons in all, of whom 8,769 occur in Palamau. The Linguistic Survey allocates only 2,000 to this district. In Ranchi the dialect is practically dead as it is spoken only by 404 persons as compared with 5,016 mentioned in the Linguistic Survey. The most idiomatic Korwa is spoken in Jashpur and Surguja in the Central Provinces, so it is natural that Palamau, which is in closest touch with these two states, should contain the vital element of the Korwa dialect in this province. Mahili shows a slight decrease from 22,069 to 20,568: this dialect which is a form of Santali very similar to Karmali is most spoken in the Santal Parganas (13,687), but it is also found in Manbhum (1,049), Singhbhum (2,958) and the states (2,874). The numbers and distribution are practically what they were in 1911. The figures of the Linguistic Survey are 17,237 in the Santal Parganas, 10,794 in Manbhum and 280 in Mayurbhanj; but the census figures appear to be the more reliable.

27. The Mundari language is spoken by 433,534 persons as compared with 475,416 in 1911, of whom 326,506 were found in Ranchi district, 38,633 in Singhbhum and 46,683 in the Orissa States, principally Gangpur (31,972) and Bonai (12,123).

MUNDARI.

In Ranchi there are therefore 327,000 Mundari speakers as compared with 330,000 Mundas; but not all the Mundari speakers are Mundas for ten years ago there were 350,000 speakers of Mundari as compared with 344,000 Mundas. There has therefore been a decrease in the proportion of Mundas speaking their own language in the cradle of the race though, like its sister languages Ho and Santali, Mundari still retains a strong hold on life.

28. The number of Santali speakers (1,390,379) is almost exactly identical with what it was in 1911 (1,390,163). There have been decreases in the Santal Parganas itself (—6,000) and Manbhum (—14,000) which are the principal Santali speaking tracts, but the migratory disposition of the Santal has led to increases elsewhere, the most important of which are in Purnea (+14,000), where Santals have been steadily immigrating into the Sadr subdivision, and in

SANTALI.

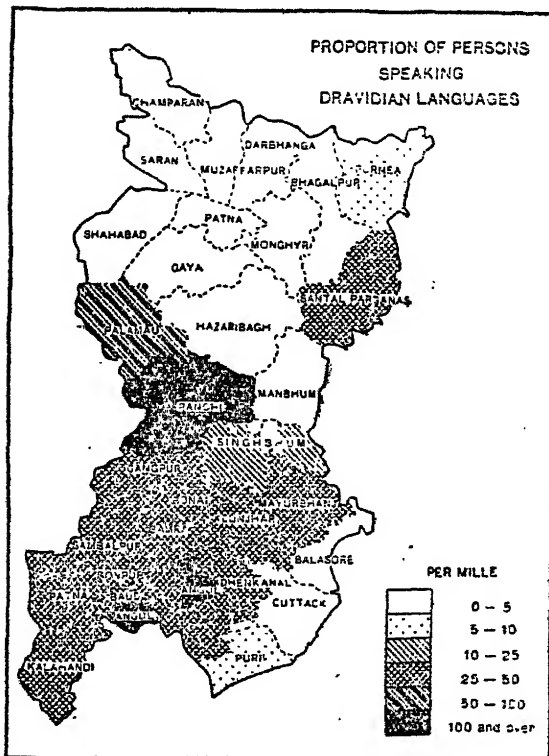
the states (+17,000). Of the Santals in the Santal Parganas 992 per mille speak Santali. These figures show that the language is still full of life and that the only place where it is at all seriously threatened is Manbhum.

29. Singli is a form of Korwa and Turi is practically Mundari. The figures show that these dialects are on the wane; they are now returned only by 875 and 1,808 persons respectively as compared with 1,614 and 2,701 in 1911.

SINGLI, TURI.

DRAVIDIAN LANGUAGES.

30. The marginal map shows the distribution of Dravidian languages by districts.



31. Gondi is a Dravidian language of the Intermediate Group which belongs properly to the Central Provinces, and is spoken by a sprinkling of people in the west of the Chota Nagpur Plateau. 234,155 Gonds by caste were returned in the province but only 383 of them speak Gondi. There has been a drop from 3,851 to 11 in Patna State.

GONDI.

32. Kandhi or Kui is the language of the Kandhs and was returned for 112,414 persons as compared with 136,711 persons in 1911. It is important only in Angul and the states of Kalahandi (59,543) and Nayagarh (3,852). Ten years ago there were 10,480 Kandhi speakers in Daspalla, but at the present census they

KANDHI.

have disappeared altogether. The Superintendent reports that the Kandhs of the state speak both Oriya and Kandhi, but that ordinarily in their homes they speak Kandhi; Kandhi should therefore have been recorded as the language of between 6,000 and 7,000 persons who were actually returned as Oriya speakers. Even allowing for this however there has been a general decrease of Kandhi speakers and the language is now spoken by only 39 per mille of the Kandhs in the province. On the supposition that there should be 6,500 Kandh speakers in Daspalla above those actually shown, the estimated numbers in the Linguistic Survey appear to be very accurate, viz., 46,622 in Angul and 14,928 in the Orissa States excluding Kalahandi. The estimated figure for Kalahandi is 64,850 which is less than the figure of the 1911 census (67,275) but more than that of the present census (59,523); apparently the hill Kandhs of Kalahandi who have hitherto adhered to their own language are slowly falling into the ways of their brethren of the plains and adopting the Oriya tongue.

33. Malhar, an insignificant dialect spoken by only 344 persons mostly in the Santal Parganas, is a form of Oraon from which it is hardly distinguishable.

MALHAR.

34. Malto, the language of the Sauria Paharias of the Santal Parganas is spoken by 60,967 persons which is greater than the number of Saurias, the difference being due to the fact already explained that some of the Mal Paharias still speak Malto. The fact that this tribe has been able to preserve its language intact for so long in close proximity to Muhammadan courts and in more recent times

MALTO.

to the "loop line" of the East Indian Railway, which was the first main line constructed from Calcutta up-country, is striking testimony to the isolation in which they have been able to envelop themselves in their corner of the hills.

35. Oraon or Kurukh is spoken by 541,059 persons or 18,436 less than in 1911 and of these 321,502 were enumerated in Ranchi district. The distribu-

ORAON.

tion is very much what it was ten years ago, though Ranchi shows a decrease of 36,412 and the states (where the Oraon language under the name of Kora is important in Gangpur, Bamra and Bonai) an increase of 15,738. Of the Oraons in the province, who include a large number of Christians, 916 per mille still speak the Oraon language and in Ranchi district 865 per mille of the Animist Oraons and 599 per mille of the Hindu Oraons do so. Oraon speakers are most numerous in Lohardaga (52,794), Sisai (32,893) and Chainpur (31,958) thanas.

36. Tamil and Telugu are spoken by immigrants from northern Madras, the former by 1,568 persons and the latter by 20,047. Tamil speakers have

TAMIL, TELUGU.

been attracted to the industrial centres of Manbhum and Singhbhum, while Telugu speakers are also found in Jamshedpur, but are more numerous in Cuttack, Puri and the Orissa States which border on Madras.

OTHER LANGUAGES.

37. Of the other languages, whether of India, or Asia outside India, or Europe all are unimportant with the exception of English which is spoken by 9,161 persons. Of these 2,598 were found in

OTHER LANGUAGES.

Patna district where most of them are accounted for by Government officials and their families and a battalion of British infantry at Dinapore. The only other districts where they number as many as 1,000 are Manbhum (1,045) and Singhbhum (1,422) where the coal-field and Jamshedpur respectively make up the numbers.

38. The general conclusion pointed to by the figures of the Chota Nagpur Plateau is that the smaller dialects are taking an unconscionable time over dying and that the more important non-Aryan

GENERAL CONCLUSION.

languages are still holding their own. This is particularly the case with the Munda languages, with the exception of Bhumij which is on the decline because it happens to be spoken in the neighbourhood of the industrialized centres of Manbhum and Singhbhum. The Dravidian languages also show little sign of decline unless it be the Oraon language in Ranchi district; but there are so many Oraon emigrants from Ranchi to Bengal and Assam that it is probable that those provinces have gained what Ranchi has lost of her Oraon speaking population.

SUBSIDIARY TABLE I.—DISTRIBUTION OF TOTAL POPULATION BY LANGUAGE (ACCORDING TO CENSUS).

LANGUAGE.	Total number of speakers (000's omitted.)		Number per mile of population of province (1921).	Where chiefly spoken.
	1921.	1911.		
1	2	3	4	5
I. LANGUAGES OF INDIA	37,953	38,426	999.8	
A. INDO-EUROPEAN FAMILY	34,668	35,081	913.3	
ARYAN SUB-FAMILY.				
INDO-ARYAN BRANCH.				
<i>Outer Sub-Branch—</i>				
Hindi (and Urdu)	25,223	24,993	624.4	Bihar and Chota Nagpur, Orissa.
Oriya	7,751	7,520	204.2	Purnea and Manbhum.
Bengali	1,657	2,295	43.7	
<i>Inner Sub-Branch—</i>				
Marwari	17	18	.5	Whole province.
OTHERS	20	12	.5	
B. AUSTRIC FAMILY	2,547	2,559	67.1	
AUSTRO-ASIATIC SUB-FAMILY.				
Munda Branch.				
Bhumij	111	106	2.9	Singbhum and Orissa States.
Ho	445	417	11.7	Singbhum and Orissa States.
Kharis	108	107	2.8	Ranchi and Orissa States.
Mabli	20	...	.6	Purnea, Singbhum and Orissa States.
Munuari	434	475	11.4	Chota Nagpur Plateau.
Santal	1,390	1,419	36.6	Chota Nagpur Plateau.
OTHERS	41	35	1.1	
C. DRAVIDIAN FAMILY	737	785	19.4	
<i>Intermediate Group—</i>				
Kandhi	113	137	2.9	Angul and Orissa States.
Malto	61	63	1.6	Santal Parvans.
Oran	541	559	14.3	Chota Nagpur Plateau.
OTHERS	29	26	.6	
D. OTHER LANGUAGES ... ..	.8	.9	.09	
II. LANGUAGES FOREIGN TO INDIA	9	10	.2	

SUBSIDIARY TABLE II.—DISTRIBUTION BY LANGUAGE OF THE POPULATION OF EACH DISTRICT.

DISTRICT AND NATURAL DIVISION.	NUMBER PER 10,000 OF POPULATION SPEAKING					
	Hindi and Urdu.	Oriya.	Bengali.	Munda languages.	Dravidian languages.	Other languages.
1	2	3	4	5	6	7
BIHAR AND ORISSA	6,644.23	2,041.69	436.49	670.97	194.09	12.53
NORTH BIHAR	9,866.57	.14	76.62	40.50	8.11	8.06
Saran	9,985.26	.004	2.70	...	.01	1.94
Champaran	9,074.89	.02	2.63	.31	.01	20.24
Muzaffarpur	9,083.24	.07	3.21	.003	...	0.48
Darbhanga	9,090.89	.02	4.83	.01	.19	4.12
Bhagalpur	9,870.33	.52	9.18	107.24	2.63	9.91
Purnea	9,260.91	.28	503.63	172.27	2.96	9.75
SOUTH BIHAR	9,956.02	.60	15.38	17.07	1.94	8.99
Patna	9,944.54	1.55	21.36	.10	.31	21.21
Gaya	9,950.81	.60	8.61	.33	.26	5.60
Shahabad	9,087.53	.00	2.74	.01	7.58	2.05
Monghyr	9,904.26	.19	21.81	63.26	.01	10.67
ORISSA	288.96	9,578.34	73.24	29.16	25.63	4.67
Cuttack	311.84	9,001.80	59.15	3.07	19.69	4.46
Balasore	303.44	9,430.13	142.43	112.13	9.05	9.89
Puri	224.40	9,680.16	33.56	.25	56.65	5.23
CHOTA NAGPUR PLATEAU	3,024.86	3,166.91	1,218.36	1,991.22	576.33	22.29
Hazaribagh	9,159.20	1.94	57.72	731.60	29.50	19.94
Ranchi	4,497.03	65.55	85.80	2,931.32	2,409.80	10.14
Palawan	9,267.59	.28	6.03	129.94	571.23	4.96
Manbhum	1,838.29	10.45	6,685.18	1,376.69	15.83	49.55
Singbhum	756.10	1,654.28	1,619.71	5,542.20	133.68	74.02
Santal Parvans	4,390.19	1.48	1,342.43	3,592.30	381.97	11.65
Angul	24.76	7,337.94	7.12	13.30	2,825.13	2.23
Samalpur	523.98	6,814.25	8.13	109.79	419.52	35.23
Orissa States	292.70	7,617.90	139.97	1,453.36	488.10	14.97
Chota Nagpur States	353.66	2,627.88	2,521.62	4,994.32	39.74	3.80

SUBSIDIARY TABLE III.—COMPARISON OF CASTE AND LANGUAGE TABLES.

LANGUAGE.	Strength of tribe (Table XIII).	Number speaking tribal language (Table X).	LANGUAGE.	Strength of tribe (Table XIII).	Number speaking tribal language (Table X).
1	2	3	1 cont.	2 cont.	3 cont.
I.—MUNDA SUB-FAMILY.			9. MUNDA	400,319	576,435
1. AGARHA	27,130	402	10. SANTAL	1,477,471	1,390,379
2. ASUR	1,656	1,713	11. TURU	45,000	881
3. DHUMRI	240,229	110,600	II.—DRAVIDIAN FAMILY.		
4. BISHAR	1,510	258	1. GOND	334,155	353
5. HO	441,425	301,174	2. KANDH	287,256	112,375
6. JUANG	10,454	10,631	3. SAURIA PAHARIA (MALTO)	55,118	60,930
7. KHARIA	124,538	105,667	4. ORAON	680,382	518,008
8. KORA	43,262	25,004			

CHAPTER X.

INFIRMITIES.

Four infirmities were recorded at this as at previous censuses, viz., insanity, deaf-mutism, blindness in both eyes, and leprosy. The instructions given were as follows:—

INTRODUCTORY.

"If any person be blind of both eyes, or insane or suffering from corrosive leprosy, or deaf and dumb, enter the name of the infirmity in this column. Do not enter those who are blind of one eye only or who are suffering from white leprosy only." These instructions were identical with those given on previous occasions except that the words "deaf and dumb from birth" were then used. As true deaf-mutism is a congenital defect, theoretically the number should not have been affected by this change; actually however, as will presently be shown, it did make some difference.

2. The following statement shows the variation in the number of persons per 100,000 afflicted in one of the four ways of which the census takes cognizance at the present and each preceding census since 1881.

GENERAL DECREASE OF THE INFIRM.

(PER 100,000.)

INFIRMITY.	1921.		1911.		1901.		1891.		1881.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Insane	14	7	16	8	17	9	20	10	20	16
Deaf-mute	66	40	90	55	95	56	139	78	192	109
Blind	82	82	111	104	112	104	122	123	160	134
Lepers	48	17	71	23	76	24	82	26	103	29

The conspicuous feature of the statement is that there has been from the first a continuous decrease in the number of afflicted persons recorded in this province, the proportions now standing at about half the figures at which they stood in 1881. The general decrease in time past has been ascribed to the greater accuracy at each succeeding census as shown in the more careful elimination of erroneous entries and partly to the progressive improvement in sanitation and material conditions and increased provision of medical relief.* In India generally as in Bihar and Orissa there was found to be a heavy decrease in the number of persons afflicted in 1901 and this was ascribed to the stress of two very severe famines which had recently occurred. In 1911 there was a further but less serious decrease in Bihar and Orissa while in India as a whole there was an increase in the number of persons afflicted. This again was ascribed to greater accuracy and to the fact that the ten years which ended with 1911 being a period of recovery from famine the infirm had a better chance of surviving. On that occasion as compared with the census of 1891, which provided the most comparable figures, it was found for India in general that the prevalence of insanity remained almost unchanged while there was a considerable diminution in that of all other infirmities and especially of leprosy. The present census of Bihar and Orissa shows a general and marked decrease in the number of persons afflicted which is as usual least marked in the case of the insane.

3. Statistics of infirmities obtained through the agency of a population census, though they have their uses, are unfortunately not reliable. To conduct an accurate census of these infirmities would require an expert investigator and a detailed inquisition into each case. The decision for instance as to who is and who is not a leper is by no means an easy one even for an expert to make; for a census enumerator in an Indian village it is really impossible. Further difficulties were caused by entries in the schedules which did not exactly tally with the instructions, for instance *adhpagal* (half-witted) or *kanu*

* India Census Report, 1911, page 344.

(one-eyed) : entries of this kind which were found at the time of slip-copying were referred to the officer in charge and he was instructed usually to leave them out of account, but in cases of doubt to refer the matter to the local officers for opinion. Apart however from the difficulty of deciding what cases come within the scope of the infirmities as defined there is the further difficulty, which is by no means confined to this province or even to India, of inducing the persons enumerated to make a truthful return of their own afflictions or those of the members of their families. No one for instance wishes to admit that he or his child is a leper, least of all if his child is approaching the age of marriage. This difficulty is so great and so general that the attempt to use the general census of the population as a means of ascertaining the extent and distribution of physical infirmities was abandoned in the United States of America in 1900, though certain questions were reintroduced in 1910. In England ever since 1881 the Census Commissioners have invariably recorded their opinion that the infirmity statistics are "unsatisfactory", "in all probability excessively inaccurate, and "not worth the cost and labour of collection and tabulation". It is to be feared that the statistics in Tables XII and XII-A and in the four subsidiary tables at the end of this chapter are open to the same doubts. In fact the question of omitting all questions regarding infirmities from the Indian census was seriously considered on the present occasion and it was only decided to retain them because there are few means of obtaining statistics on this subject in India and because, as the errors are to some extent constant, the statistics of distribution and variation are of some comparative interest. The unusual decrease in the number of the afflicted in the census returns on the present occasion is attributable to two principal causes, one founded on fact and one not. In the first place in a period of distress and scarcity such as occurred in 1918 and 1919 the infirm are apt to go to the wall. They cannot flee before the storm like their able-bodied neighbours: they have to stay behind and take their chance. The infirm must moreover in the great majority of cases be dependants; and one of the features of the influenza epidemic of 1918 was the number of workers whom it killed off, leaving their dependants to the charity of the well-disposed or of Government; while therefore there is no reason to suppose that the influenza was specially fatal to the infirm it must indirectly have made it very difficult for many of them to survive. When the scarcity followed upon the influenza the position of many of them must have become even worse: in periods of distress the purse strings of charity are apt to be tightened, and for infirm persons who had just lost their supporters in the epidemic the position must have been an extremely difficult one. In these circumstances it is highly probable that there was heavy mortality amongst them though it is impossible to estimate its extent. The second reason of the decrease is that there were great difficulties in conducting a census of the people at all in the early months of 1921 and, with this feeling abroad, inquisitorial questions with regard to infirmities would be specially resented and specially unlikely to receive a correct answer: an attempt for instance to collect statistics of goitre in areas where the disease was known to be common was a complete failure. These are the two chief causes that have reduced the number of infirm persons in the census tables and it is necessary to offer this warning with regard to their accuracy before considering the figures in detail. The distribution by locality and age is however much as usual and there is no reason to doubt the accuracy of the statistics in these general features.

INSANITY.

4. Even in Europe the attempt to distinguish in a census between insanity proper, *i.e.*, serious mental derangement, and idiocy has proved impossible. In the present census of India no

MEANING OF INSANITY.

attempt was made to draw this distinction and the figures therefore relate to both kinds of mental defect, the enumerators being instructed to record persons who were insane (*pagal*). Idiocy however is usually a congenital defect and from the fact that the number of insane persons in the earlier age-periods is small, two inferences may be drawn

that parents are not willing to admit that their children are insane until it is proved up to the hilt that they are so, and probably also that the percentage of the weak-minded amongst those recorded as insane is not high so that the statistics refer principally to insanity proper. It will be seen from the fly-leaf to Table XII that six persons only were recorded as both deaf-mute and insane: it is however probable that the number of cases in which these infirmities are combined is much greater than this. The form of deaf-mutism associated with cretinism which is specially prevalent in Champaran and to a less extent in Saran and the other districts of North Bihar is frequently combined with insanity. Some enquiries were made in 1901 with regard to the persons returned as deaf-mute and it was then found that out of 178 genuine cases of deaf-mutism in Saran and Champaran 22 were insane and 43 were weak-minded while 51 were suffering from goitre. It is probable therefore that on a strict investigation many of the persons returned as deaf-mutes would be returned also as insane. This would partly account for the low percentage of insanity in North Bihar, where the number of deaf-mutes is greater than elsewhere.

5. The number of insane persons in this province has always been far less than in Bengal and the number is highest in that Natural Division which is most akin to the other province, namely Orissa.

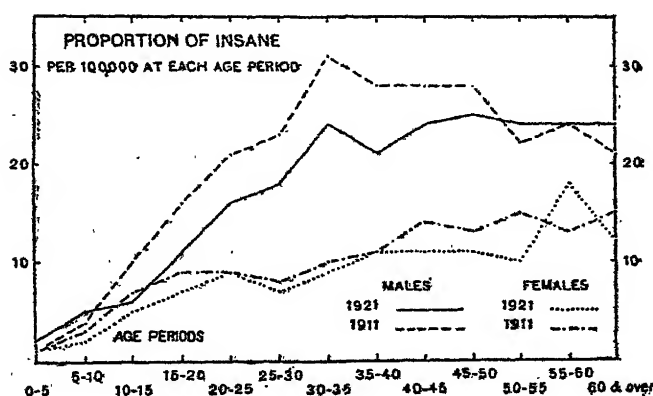
LOCAL DISTRIBUTION.

Various suggestions have been made to explain this comparative immunity from insanity but, apart from the general fact that a peaceful village life does not lead to nervous breakdowns or mental derangement, it cannot be said that any of them have passed beyond the stage of conjecture. In Puri and Cuttack the proportion of insane is high and in Orissa as a whole the proportion is 22 males out of every 100,000. South Bihar comes next with 17 males out of every 100,000; then North Bihar with 12 and the Chota Nagpur Plateau with 11. Puri shares with Patna and Ranchi, where there are mental hospitals, the highest proportion of insane in the province: if the inmates of the mental hospitals at Patna and Ranchi who were born outside those districts are eliminated, the proportions sink respectively to 5 and 6 per 100,000 males. Beyond the fact that Orissa is more afflicted by this infirmity than other parts of the province there is no special feature about the geographical distribution which calls for remark.

6. As was the case ten years ago the proportion of males who are insane (14 per 100,000) is just double the number of females (7); and where insanity is more common, in Orissa and South Bihar, the relative proportion of males rises still higher.

DISTRIBUTION BY SEX AND AGE.

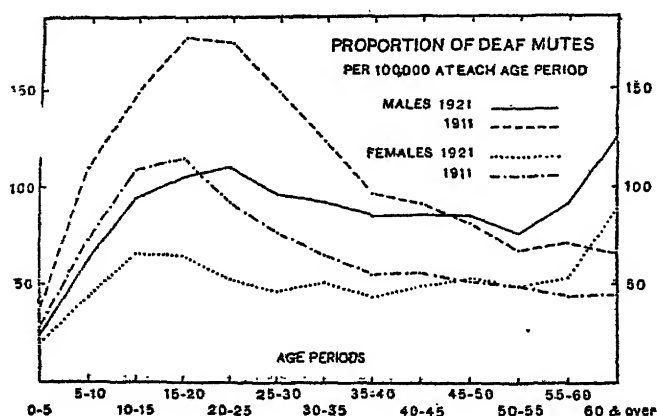
If the males of the province for the most part live peaceful lives in which overwrought nerves and mental exhaustion are unknown, the women have still less cause for mental anxiety, and this may account partly for the lower incidence of insanity amongst them. Also it is easier to suppress the fact of insanity in the case of a female than in that of a male for the enumerator does not have access to the *zenana*. In England and Wales not only is the incidence of insanity far higher (449 for 100,000 in 1911) but the proportion amongst females is higher than amongst males. The ages at which insanity occurs most frequently in this province are from 20 to 40, the nucleus being the age period 30-35; these are the ages at which the male proportions rise high above the female, the disparity between the sexes at the extreme age-periods being less. The figures are illustrated in the marginal diagram.



DEAF-MUTISM.

7. The number of recorded deaf-mutes in the province is 20,036 or 7,682 less than it was ten years ago. Out of every 100,000 males 66 are deaf-mutes and 40 out of every 100,000 females. In

DISTRIBUTION OF DEAF-MUTES. this respect North Bihar comes off worse than the rest of the province, the proportion of males and females afflicted in this Natural Division (107 and 66 per 100,000 respectively) being more than twice the proportions in any other. This particular affliction is specially common in the Tirhut Division, where there are four times more persons so afflicted than in any other of the Commissioners' divisions, and above all in Champaran where there are 3,791 deaf-mute persons. In Champaran they were recorded in the greatest numbers near the two towns in Bettiah and Motihari thanas, but the only thana in which the affliction is not common is Adapur. In Saran more than half of the deaf-mutes in the district were found in Gopalganj, Mirganj and Siwan thanas and in Muzaffarpur a third of the district total comes from Muzaffarpur thana. In Darbhanga the



affliction is more equally distributed, but on the whole it is more common in the north of the district than in the south. Deaf-mutism is associated with cretinism and cretins are generally short-lived; hence it is that in the marginal diagram which shows the proportional distribution of deaf-mutes by age periods the highest points are reached between the ages of 10 and 25.

At the present census there is a sharp increase in the last age periods, which probably represents an increase not of genuine deaf-mutes but of persons, "sans teeth, sans eyes, sans taste, sans everything," whose hearing and capacity for intelligent conversation have failed with the advance of old age. This is the more probable because at the present census the restriction was no longer imposed as it had been at previous censuses that only those deaf-mutes should be included who had been so afflicted from birth.

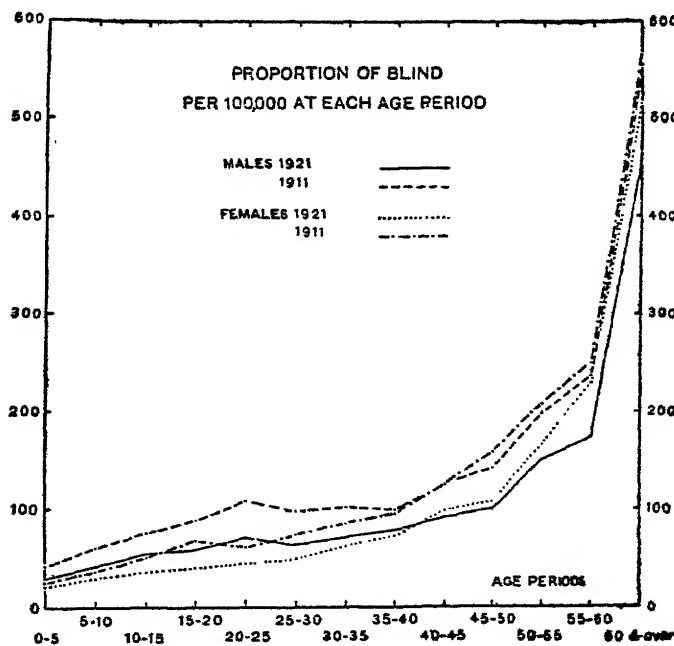
BLINDNESS.

8. The number of blind persons in Bihar and Orissa according to the returns now stands at 31,092 or 82 per 100,000 in the case of both sexes as against 111 in the case of males and 104 in the case of females in 1911. The instructions were

BLINDNESS.

that only persons totally blind should be recorded as blind in the schedules and in the specimen schedule, which contains the names of imaginary persons suffering from a variety of infirmities and which is perhaps the most important basis of the training of the census staff in their duties. Bahora Raut's mother, the unfortunate to whose lot it fell to be blind, was described as *donon ankh ki andhi*. It is possible that this insistence on her completely blind state may have resulted in the exclusion of certain persons who otherwise would have been included. Allowing for the general decrease the distribution of blindness in the province by locality, sex and age remains much what it has been on previous occasions. Blindness is common where there is a dry, hot climate and a dusty soil. In Bihar both these two conditions are fulfilled; the glaring sunshine and the dust-laden winds of the hot weather quickly cause inflammation of the eyes which, being neglected or mishandled, frequently results in ulceration and

permanent injury. Cataract is a disease that is very prevalent in the north of the province and during the ten years 1912—1921 no less than 33,653 operations for cataract were performed of which 28,794 or 86 per cent. were successful. From 1901 to 1910 the total number of such operations performed in the whole of Bengal, Bihar and Orissa was 37,326 and for the preceding decade it was 15,987 which shows the demand for and the growing popularity of such operations. The local distribution of blindness is much what it was in 1911. It is most prevalent in South Bihar and worst in Shahabad where 165 persons in every 100,000 are afflicted in this way. Patna and Gaya also recorded over 100 per 100,000, the only other district of the province which did so being Palamau, where conditions are different and where it is difficult to account for the high proportion except on the hypothesis of more accurate enumeration. In Orissa the dampness of the atmosphere and in Chota Nagpur the hills and forests prevent the clouds of dust that sweep over the plains of northern India and thereby reduce the incidence of blindness. In Orissa Balasore has for some reason or other always been less afflicted in this respect than either Cuttack or Puri: in the Chota Nagpur Plateau it is Singhbhum and the Chota Nagpur States where the incidence is lightest. The marginal diagram shows that the proportion of blind persons increases with age. The proportion of



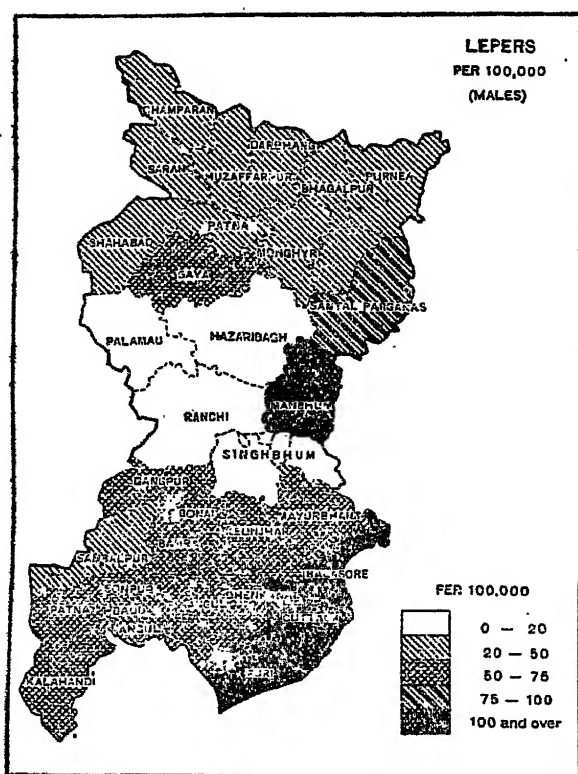
persons totally blind who are so born is small and it steadily increases throughout life in a manner that suggests that blindness which is not simply failing vision due to old age is nearly always the result of injuries received. The proportion of males who are blind exceeds that of females up to the age of 40 from which point females predominate. This is generally ascribed to the fact that the women live a more confined life than the men, that their eyes are more affected by the smoky atmosphere in the houses, and that they repair less to the hospitals for medical and surgical aid. To this may perhaps be added that by the violence of the contrast the glare is likely to produce a more deleterious effect on eyes accustomed to the half light of windowless rooms than on the eyes of persons accustomed to spend the whole day in the open air or the verandah.

LEPROSY.

9. In the case of infirmities the proportion of females to males is a rough indication of the degree of dishonour attaching to them in the public estimation and therefore also the likelihood of deliberate suppression. In the case of leprosy the proportion of females (374 per 1,000 males) is much lower than in the case of any other infirmity. The number of lepers recorded in the province was 8,971 males and 3,338 females or 12,269 in all as compared with 17,835 in 1911, while the proportions of 71 and 23 per 100,000 males and females

LOCAL DISTRIBUTION.

respectively in 1911 have fallen to 48 and 17. The disease is very local in



its distribution as the marginal map shows. In Orissa it is worst and fairly evenly distributed, 129 in every 100,000 males and 35 in every 100,000 females being afflicted with it. Puri is the district worst afflicted because lepers collect there to beg alms from the pilgrims; then Cuttack, where there is a leper asylum, and then Balasore, though actually the largest number of lepers enumerated in any one district is found in Cuttack (1,625). Outside Orissa the distribution is very uneven. Manbhum with 1,441 lepers alone shows a proportion of over 100 per 100,000 males: in this district the disease is specially prevalent in Purulia where there is a large leper asylum, and in Raghunathpur, Nirsa and

Gaurandi to the east and north of it. But the proportion is high also in the Santal Parganas (87) which adjoins the badly affected districts of Manbhum, Burdwan and Birbhum, and Gaya (71) which is a pilgrim centre. How local the distribution is may be gauged from the fact that of the three Chota Nagpur districts which adjoin Manbhum the proportions per 100,000 males are only 4 in Hazaribagh, and 10 in Ranchi and Singhbhum.

10. There is a tendency for lepers to concentrate at particular places and the effects of this tendency are further enhanced by the creation of

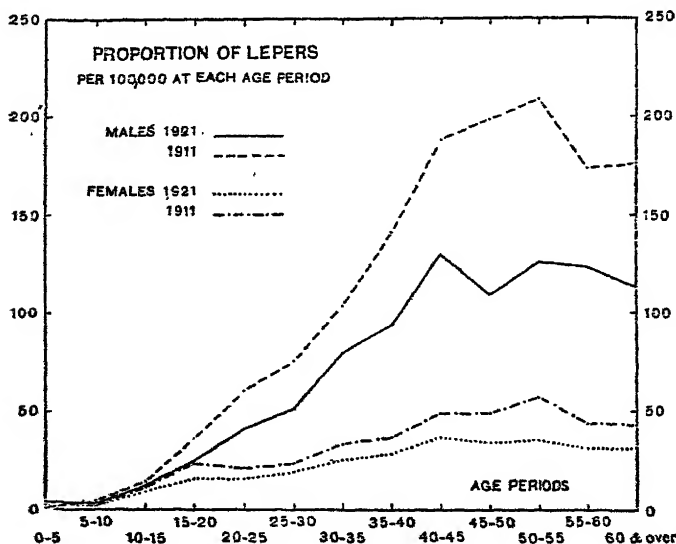
LEPER ASYLUMS.

asylums for lepers and the enforcement of the Indian Lepers Act. Lepers naturally congregate where they hope to obtain alms by begging, particularly at pilgrim centres such as Gaya, Deoghar, and Puri, and it is therefore at these places that the leper asylums are erected and to them that the Act is applied. When the Act has been extended to any area, the police can arrest in that area without a warrant any person who appears to be a pauper leper, and on the certificate of an inspector of lepers and under the orders of a magistrate the arrested person can then be detained in an asylum. Ten years ago there were seven leper asylums in this province, one each at Muzaffarpur, Bhagalpur, Deoghar, Puri, Sambalpur, Lohardaga and Purulia. Since then the Sambalpur asylum has been closed and its inmates transferred to a new asylum at Cuttack while another new asylum was opened at Gaya in 1913. The Lohardaga asylum, which has never been declared under the Act and where therefore the inmates are voluntary, was started nearly 40 years ago by the German Lutheran mission; at this census it was found to contain 10 lepers of whom all but one were born in Ranchi district. The Purulia asylum was founded in 1881 also by the German Lutheran mission: some 20 years later the Act was applied to Manbhum and the Purulia asylum was declared to be an asylum to which lepers could be sent from the district of Manbhum. At this census it contained 678 lepers of whom 649 were natives of the district. The Bhagalpur asylum is also an old institution of more than 30 years' standing and lepers have been taken to it under the Act from the town of

Bhagalpur since 1903: in 1912 the Act extended to the whole district. Statistics with regard to the number of inmates are unfortunately not available but it usually contains about 140 lepers. The Deoghar asylum was not recognized under the Act until 1917 when it was declared to be the asylum for the neighbouring areas of the Santal Parganas: it contained 58 lepers at the census. Puri has no asylum but it has long had a leper colony which at the time of the census contained 60 lepers of whom only 11 were born in the district, most of them coming from Keonjhar or Assam. The asylum at Cuttack contained 176 lepers of whom rather more than half were natives of that district. This asylum was only opened in 1919 when it was declared to be an asylum for the five districts of the Orissa Division and the Feudatory States of Orissa. The asylum at Muzaffarpur, which after Lohardaga is the smallest in the province, has been declared under the Act to be an asylum for Muzaffarpur thana. The King Edward memorial leper asylum at Gaya which was declared in 1913 to be the asylum for Gaya thana contained 212 persons on the census night. In British territory therefore, omitting Puri and including 140 on account of Bhagalpur, 1,296 of the 10,596 lepers or rather over 12 per cent. were enumerated in asylums. There is also a leper asylum in the state of Mayurkhanj which is subsidized by the Maharaja and contains between 80 and 90 inmates. A large home for lepers which will eventually accommodate 1,000 inmates, voluntary and compulsory, is being started through mission agency near Dumka. The Mission to Lepers in India and the East either supports or helps to support or provides Christian teaching in all the asylums in the province.

11. Amongst males the proportion of afflicted to the population in each age-period, as the marginal diagram shows, increases steadily up to

DISTRIBUTION BY AGE.



the age 50-55 and then starts to decline. In the case of females the maximum proportion is reached ten years earlier in the age period 40-45. In genuine cases of leprosy life is not long and Sir Edward Gait in his Bengal Census Report of 1901 refers to an estimate which puts the life of a leper attacked with anæsthetic leprosy at nine and half years and with anaesthetic leprosy at eighteen and a half years (from the date of attack). This would account for the declining proportions of lepers at the advanced age-periods.

12. The last ten years have opened new hopes to the unfortunate persons afflicted by this disease. A new treatment by the injection of the soluble

TREATMENT OF LEPROSY.

products of the active principle of *chaulmogra* and other oils has been attended with considerable success. Research is now being carried on in the Calcutta school of tropical medicine by Doctor Muir whose opinion it is that the treatment results in an improvement in almost all cases up to a certain point and then an arrest after which the improvement can generally be continued by other treatment. Sir Leonard Rogers, to whose inspiration this work owes its origin, also considers it clear that a very great advance has been made in the treatment of leprosy by the Calcutta investigations.

13. Table XII-A contains statistics of the infirmities of certain selected castes which are important owing to their numbers or social position or which had been found at previous censuses to be specially afflicted with any of these four infirmities. So far as the members of the castes are interrelated and the infirmities hereditary these figures have their interest, but a more interesting correlation would be with occupation. A study of the distribution of infirmities by caste does not lead to any very helpful conclusion. Of the castes sorted for, the Tambulis nearly all of whom come from Bihar and the Baniyas have the highest proportions of persons afflicted with each of the three infirmities other than leprosy. Amongst the insane the Kayasths (23 per 100,000), the Karans (21) and the Brahmans (19) have a high proportion of afflicted which may perhaps show a connexion between mental activity and insanity. Amongst the deaf-mutes the Tambulis with 203 persons afflicted in every 100,000 have a proportion twice as high as any other caste, but in all there are only 79 members of the caste so afflicted. Amongst the blind the Tambulis with 231 per 100,000 again lead the field, the Baniyas coming second with 203. It is impossible to find any explanation for the variations of incidence by caste: that a high proportion of Baniyas and Darzis are blind might be accounted for by the fact that their occupations are trying to the eyes, but the Karans and Kayasths, whose occupations are no less trying to the eyes, do not suffer to the same extent. Generally speaking the aboriginal tribes, who do not live in Bihar and whose eyes are not tried by minute handicraft, are not sufferers from blindness to any serious extent but amongst the Oraons the proportion is high (118 per 100,000). In the case of leprosy the variations are susceptible of a more reasoned explanation, it being clear that the most important determining factor is locality. The caste which is most afflicted is the Bauri caste which was only sorted for in the districts of Manbhum, the Santal Parganas, Cuttack and Puri, four of the five districts in which leprosy is most common. Of this caste 146 in every 100,000 are lepers, a figure which is nearly twice as high as that of the Chasas who come next with 75 per 100,000. The Chasas and the principal castes of Orissa, where leprosy is particularly prevalent, the Gauras (42 per 100,000), the Kandhs (62), the Karans (60) and the Khandaits (59) all have a high proportion of lepers. Outside the specially affected areas, the Tambulis (72) and the Baniyas (69) again seem for some unknown reason to be specially afflicted: the Indian Christians have a high proportion (61) because the leper asylums are the special care of the Christian missions and there is a natural tendency for the inmates to be converted to the religion of their benefactors.

SUBSIDIARY TABLE I.—NUMBER OF PERSONS AFFLICTED PER 100,000 OF THE POPULATION AT EACH OF THE LAST FIVE CENSUSES.

DISTRICT AND NATURAL DIVISION.	INFANT.										DEAF-MUTE.									
	Males.					Females.					Males.					Females.				
	1921.	1911.	1901.	1891.	1881.	1921.	1911.	1901.	1891.	1881.	1921.	1911.	1901.	1891.	1881.	1921.	1911.	1901.	1891.	1881.
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
BIHAR AND ORISSA ...	14	16	17	20	29	7	8	9	10	16	66	90	95	139	192	40	55	56	78	109
NORTH BIHAR ...	12	12	13	19	33	6	6	6	8	18	107	132	150	210	264	66	80	85	116	145
Saran ...	16	16	16	22	33	7	7	8	7	10	135	127	135	195	155	65	70	67	120	96
Champaran ...	24	9	9	21	56	14	4	9	7	32	226	208	275	434	367	155	130	173	265	337
Muzaffarpur ...	8	9	10	15	22	3	3	3	6	19	123	144	145	156	225	74	51	75	77	119
Darbhanga ...	12	11	9	12	25	5	5	5	5	18	53	111	117	155	179	60	70	65	70	52
Bhagalpur ...	5	10	13	19	29	2	6	7	6	15	31	66	127	120	225	15	43	73	99	134
Purnea ...	9	18	25	39	53	6	13	13	20	24	64	124	120	150	243	44	95	84	120	174
SOUTH BIHAR ...	17	20	17	21	22	7	9	8	9	13	41	67	63	91	175	24	40	35	50	103
Patna ...	26	35	35	40	36	13	14	12	12	23	39	64	61	62	227	23	42	34	37	151
Gaya ...	11	13	12	18	17	6	9	6	8	12	37	67	49	104	153	22	37	26	56	103
Shahabad ...	15	16	12	25	22	10	7	5	5	10	51	59	54	136	121	24	30	27	42	66
Monghyr ...	8	17	13	14	16	3	7	7	9	7	36	86	85	119	172	24	45	51	65	92
ORISSA ...	22	24	27	27	34	8	10	12	12	16	40	72	64	116	126	17	33	29	59	70
Cuttack ...	25	23	27	23	31	9	10	12	9	15	23	57	59	115	116	15	20	29	62	64
Balasore ...	11	23	24	24	25	5	11	13	10	15	17	65	56	109	176	6	30	38	57	101
Puri ...	26	27	25	41	47	7	8	13	19	21	75	51	50	124	95	34	23	21	53	50
CHOTA NAGPUR PLATEAU ...	11	15	18	17	23	7	9	11	11	15	43	63	60	65	92	29	44	43	40	59
Hazaribagh ...	26	11	13	13	15	2	8	5	6	13	22	62	54	73	105	15	35	40	46	60
Ranchi ...	26	20	21	25	20	19	14	17	16	16	46	55	60	77	51	38	47	55	51	59
Palamau ...	17	10	12	20	10	5	13	13	16	16	56	49	63	90	103	45	41	50	52	62
Manbhum ...	7	10	24	27	32	6	13	14	16	16	42	50	53	90	103	26	50	45	52	62
Singbhum ...	8	14	19	17	27	4	11	16	24	24	44	53	66	55	67	31	50	52	60	55
Santal Parganas ...	7	14	17	13	23	5	7	11	8	13	25	72	82	49	61	15	50	59	23	57
Angul ...	5	4	16	23	45	5	3	3	5	32	65	69	66	101	165	33	40	39	44	55
Sambalpur ...	15	19	16	...	...	7	8	6	...	...	70	63	57	...	...	54	50	41	...	...
Orissa States ...	10	15	18	...	...	6	7	9	...	...	43	51	49	...	...	27	33	26	...	...
Chota Nagpur States ...	4	8	10	...	...	9	3	7	...	...	47	45	63	...	...	36	35	36	...	...

DISTRICT AND NATURAL DIVISION.	BLIND.										LEPERS.									
	Males.					Females.					Males.					Females.				
	1921.	1911.	1901.	1891.	1881.	1921.	1911.	1901.	1891.	1881.	1921.	1911.	1901.	1891.	1881.	1921.	1911.	1901.	1891.	1881.
	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
BIHAR AND ORISSA—continued ...	82	111	112	122	160	82	104	104	123	184	48	71	76	82	103	17	23	24	26	29
NORTH BIHAR ...	76	132	105	121	146	72	84	86	113	152	27	48	47	65	76	6	9	10	12	17
Saran ...	96	83	127	173	163	91	103	100	145	162	37	64	49	55	98	6	9	7	10	15
Champaran ...	95	92	94	114	156	92	78	56	103	173	31	37	33	53	63	6	5	4	10	10
Muzaffarpur ...	60	118	102	105	140	64	69	68	97	138	26	43	47	62	54	4	4	10	5	8
Darbhanga ...	69	91	101	93	114	64	91	81	63	97	35	40	33	41	46	6	6	4	7	9
Bhagalpur ...	40	66	113	137	180	48	77	96	128	173	27	50	56	70	75	8	17	16	23	26
Purnea ...	51	...	96	99	180	45	94	55	115	168	20	56	70	94	78	7	17	21	25	23
SOUTH BIHAR ...	116	171	162	170	248	126	162	151	175	301	40	74	77	95	132	9	13	12	20	25
Patna ...	117	163	167	173	310	122	172	194	181	427	34	64	77	69	132	6	11	9	10	33
Gaya ...	123	196	145	153	248	137	169	138	161	300	71	105	102	127	163	16	19	16	27	30
Shahabad ...	165	144	181	329	355	190	157	153	198	311	25	53	57	130	140	7	8	9	13	27
Monghyr ...	64	...	141	161	155	59	138	130	150	179	23	63	73	103	90	7	12	13	27	18
ORISSA ...	71	92	82	89	106	53	69	63	93	128	129	159	170	168	190	35	43	49	59	61
Cuttack ...	64	107	97	89	108	59	60	73	95	139	132	148	153	128	171	33	43	44	45	57
Balasore ...	36	63	45	63	84	34	56	44	60	107	103	159	157	155	214	27	45	53	59	64
Puri ...	81	94	89	117	124	60	61	63	119	135	143	180	155	229	204	47	60	58	62	75
CHOTA NAGPUR PLATEAU ...	70	91	97	83	107	78	102	109	101	131	50	66	75	51	69	30	37	40	41	38
Hazaribagh ...	43	100	94	85	116	49	93	90	100	145	4	16	15	30	26	3	7	9	13	15
Ranchi ...	86	100	122	143	122	37	109	141	143	152	10	13	35	37	40	5	10	13	20	26
Palamau ...	138	95	140	...	...	158	115	145	...	...	18	13	23	...	...	16	14	13	...	...
Manbhum ...	70	150	148	146	137	60	212	205	190	180	101	155	156	107	160	85	106	120	139	57
Singbhum ...	39	55	67	74	70	40	63	81	89	61	10	30	47	43	62	6	17	32	34	44
Santal Parganas ...	54	88	105	43	76	60	97	123	46	64	57	100	127	67	69	41	47	50	35	32
Angul ...	92	96	96	123	154	86	90	95	127	136	50	64	77	73	163	16	35	39	33	78
Sambalpur ...	74	83	79	...	...	100	113	84	...	...	48	69	37	...	...	...	...	...	...	...
Orissa States ...	74	69	65	...	...	78	67	65	...	...	58	64	64	...	...	30	36	32	...	...
Chota Nagpur States ...	42	39	80	...	...	60	37	67	...	...	1	11	28	...	...	5	3	17	...	...

SUBSIDIARY TABLE II.—DISTRIBUTION OF THE INFIRM BY AGE PER 10,000 OF EACH SEX.

PART II.—BIHAR AND ORISSA. (Two censuses.)

Age.	INSANE.				DEAF-MUTE.			
	Males.		Females.		Males.		Females.	
	1921.	1911.	1921.	1911.	1921.	1911.	1921.	1911.
1	2	3	4	5	6	7	8	9
	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
TOTAL ...	...	...	...	...	...	...	...	...
0-5 ...	164	80	218	50	341	440	473	558
5-10 ...	635	427	511	453	1,258	1,558	1,365	1,573
10-15 ...	551	754	706	593	1,402	1,342	1,405	1,506
15-20 ...	675	807	794	882	1,065	1,272	1,017	1,254
20-25 ...	823	937	1,021	1,017	855	1,121	850	1,181
25-30 ...	1,134	1,247	931	979	905	1,100	857	1,036
30-35 ...	1,407	1,554	1,071	1,050	605	900	673	800
35-40 ...	1,033	1,120	901	868	604	550	574	457
40-45 ...	1,049	1,010	1,036	1,017	632	495	506	453
45-50 ...	749	657	608	500	429	260	290	264
50-55 ...	671	523	575	747	303	255	391	299
55-60 ...	812	257	452	309	195	109	185	119
60 and over ...	764	597	1,013	1,114	257	262	1,002	291

Age.	BLIND.				LEPERS.			
	Males.		Females.		Males.		Females.	
	1921.	1911.	1921.	1911.	1921.	1911.	1921.	1911.
	10	11	12	13	14	15	16	17
TOTAL ...	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
0-5	401	479	558	331	95	27	133	93
5-10	806	803	531	521	132	80	504	200
10-15	869	842	456	454	316	243	563	477
15-20	616	636	377	453	452	411	707	775
20-25	611	656	440	437	608	613	710	754
25-30	648	764	534	639	694	699	965	969
30-35	693	755	655	653	1,325	1,167	1,270	1,308
35-40	636	570	577	507	1,207	1,279	1,079	931
40-45	680	643	739	760	1,420	1,530	1,321	1,252
45-50	510	473	497	641	947	1,030	761	703
50-55	717	683	809	811	1,080	1,123	831	1,019
55-60	300	267	502	442	452	437	352	255
60 and over	2,441	2,225	3,235	3,258	1,022	1,132	1,043	1,135

SUBSIDIARY TABLE III.—NUMBER AFFLICTED PER 100,000 OF EACH AGE PERIOD AND NUMBER OF FEMALES AFFLICTED PER 1,000 MALES.

Age.	NUMBER AFFLICTED PER 100,000.								NUMBER OF FEMALES AFFLICTED PER 1,000 MALES.			
	Insane.		Deaf-mute.		Blind.		Lepers.		Insane.	Deaf-mute.	Blind.	Lepers.
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.				
1	2	3	4	5	6	7	8	9	10	11	12	13
ALL AGES ...	14	7	66	40	83	82	48	17	519	633	1,037	374
0-5 ...	2	1	19	16	28	20	4	2	690	676	745	541
5-10 ...	5	2	50	35	40	28	4	3	417	687	671	740
10-15 ...	6	5	75	53	51	35	12	9	485	560	543	670
15-20 ...	11	7	84	63	59	39	25	16	629	588	633	594
20-25 ...	16	9	88	42	70	44	41	10	645	569	746	435
25-30 ...	18	7	77	38	63	63	61	19	445	545	854	404
30-35 ...	24	9	74	41	71	63	79	20	358	617	975	358
35-40 ...	21	11	68	35	78	73	93	28	498	624	940	308
40-45 ...	24	11	69	39	93	93	113	37	498	607	1,127	345
45-50 ...	25	11	68	43	100	107	100	34	620	590	1,010	300
50-55 ...	24	10	61	39	160	166	126	36	448	685	1,171	268
55-60 ...	24	18	73	42	173	228	125	32	800	611	1,410	275
60 and over ...	24	12	100	71	483	519	113	32	609	965	1,531	551

SUBSIDIARY TABLE IV.—PROPORTION OF INFIRM IN CERTAIN CASTES.

CASTES.	PROPORTION PER 100,000 OF EACH CASTE WHO ARE			
	Insane.	Deaf-mute.	Blind.	Leper.
	2	3	4	5
Babhan	9	43	53	13
Baniya	31	104	204	69
Bauri	7	38	87	145
Bhuiya	7	30	83	40
Brahman	19	53	74	28
Chamar	10	70	108	22
Chasa	10	84	65	75
Dhobi	11	68	91	43
Dom	11	44	84	64
Dosadh	9	61	128	22
Gaura	6	31	59	42
Goala	7	59	74	14
Hajjam	10	63	125	28
Ho	3	14	21	2
Kahar	12	48	153	29
Kamar	13	71	95	35
Kandh	11	49	96	62
Kanda	10	87	115	22
Karan	21	23	49	60
Kayasth	23	62	83	23
Khandait	11	20	67	59
Koiri	10	99	91	23
Kumhar	6	48	73	31
Kurmi	8	50	93	39
Mallah	13	35	87	18
Munda	10	30	49	13
Musahar	2	17	33	17
Nuniya	11	67	95	23
Oron	9	37	118	11
Pan	6	26	68	59
Rajput	14	58	82	24
Santal	4	22	38	30
Sonar	18	79	104	21
Tamboli	54	203	231	72
Tanti	6	43	72	34
Teli	11	64	100	43
Darai	20	87	132	17
Dhuniya	10	83	85	28
Jolaha	11	76	92	16
Kunjra	7	53	60	13
Shelkh	9	69	74	19
Indian Christian	11	31	89	61

CHAPTER XI.

CASTE, RACE OR NATIONALITY.

The ethnographical and descriptive portion of the chapter on caste has perhaps received more attention than any other part of previous census reports, and in a general survey such as is permissible within the limitations of a report of this kind there is little that could profitably be added to what has already been said in previous reports with regard to the customs and organization of the different castes and tribes. Not that the interest of caste from the ethnographical point of view has been in any way exhausted, for the subject is of human and inexhaustible interest, but the study has now reached a point at which it has become a specialized branch of science from which further advance must be made by detailed investigations conducted by specially qualified experts. Bihar and Orissa is fortunate in this respect. The volumes that have appeared on the Mundas and Oraons, the articles (most of them from a non-official pen) that have appeared from time to time in the Bihar and Orissa Research Society's journal and "Man in India" (issued in this province and the only anthropological journal in India), and the creation of a chair of anthropology in the provincial university are indications that this is the course along which the science is progressing in this province. The function of a census report is to take the whole province for its field and to trace at regular intervals the distribution and variation of the population and their causes. Caste is only one of many causes producing the results which it is the function of a census report to trace and explain, and in view of the mass of information available on this subject in previous reports, it was decided that ethnological enquiries with regard to caste should not be conducted in connexion with the census of 1921 on the same scale as on previous occasions.

2. A resolution was indeed actually put down by a member of the Indian Legislative Assembly, though eventually it was not moved, to the effect that the question regarding caste should be omitted altogether from the census schedule and that the classification of the Hindu population into castes in the census tables should be discontinued on the grounds that it was an anomaly for a Christian Government to assist in the perpetuation of the caste system, thereby encouraging feuds between caste and caste, and also that the statistics were inaccurate and served no useful purpose. The caste system is the steel frame of Hindu society and in Hindu literature the mixing up of castes has always been regarded as synonymous with chaos. In Bihar and Orissa at all events there is no sign of the caste system breaking down or ceasing to be the dominant influence that it has always been. The most important aspect of caste is the system of restrictions on marriage which it imposes and neglect of caste distinctions in this matter is unheard of. As between sub-castes within the limits of the same caste there are signs of relaxation, notably amongst the Kayasths who are the most highly educated caste in the community. Cases of this kind have occurred amongst the Bihari but more particularly amongst the domiciled Bengali Kayasths, where a *rapprochement* has occurred between the Dakshin Rarhi and the Uttar Rarhi and Bangaja sub-castes. The Goalas or Ahirs also, who have recently been engaged in an effort to improve their social position, aspire to neglect sub-caste in arranging their marriages. The same thing has been occurring in Orissa between the Sasani and Mastan sub-castes of Brahmans and the Sasani Brahmans and the Chaudhuri family of Bhingarpur. Such incidents however which have only been noticed amongst the upper and more educated castes or castes that are aspiring to the upper ranks, are to be regarded not as signs portending the collapse of the caste system but of its adjustment to modern conditions. The same may be said with regard to modifications of the rules about personal contact or the touching of what is eaten or drunk.

Amongst the Hindu castes that served overseas in the war, the purification ceremony necessary after crossing the ocean has apparently become purely nominal: only one case that arose in connexion with the war, that of some Kayasths of Darbhanga, is mentioned by correspondents in which the necessity for such a ceremony gave rise to any discussion and that case was amicably settled. In places like Jamshedpur * where work is done under modern conditions men of all castes and races work side by side in the mill without any misgivings regarding the caste of their neighbours. But because the facts of every day life make it impossible to follow the same practical rules as were followed a hundred years ago it is not to be supposed that the distinctions of pure and impure, touchable and untouchable are no longer observed. A high caste Hindu would not allow an "untouchable" to sit on the same seat or to smoke the same *hookah* or to touch his person, his seat, his food or the water he drinks: for a breach of this rule a bath in cold water is the minimum purification prescribed. Within the last ten years the children of the untouchable classes attending one of the zilla schools in this province were made to sit in the verandahs and it was found necessary to make the grant of allowances for such children strictly conditional on their being given equal facilities for instruction with the other children. There is indeed little to show that the rules of touch are falling into disuse except in so far as they have become incompatible with the routine of every-day life. At railway stations no questions are asked with regard to the caste of one's fellow passengers or the railway porters who handle one's baggage but the man who supplies drinking water to thirsty passengers is still (except in parts of Chota Nagpur) a Brahman.

3. Generally therefore the principle of clean and unclean is still there though not perhaps so obvious as formerly, and there is little sign either of the rules being relaxed in any vital respect or of

THE UNTOUCHABLES.

castes which were formerly regarded as unclean coming to be regarded as clean or touchable. One instance is reported from Balasore where in old days only those aboriginal Nayaks who were village-priests were allowed to offer water to Hindus of high caste, whereas nowadays Brahmans and Karans will take water from a Nayak whether he is a priest or not. The rules as to which castes are and which are not clean vary indeed in different places and when Animists turn Hindu there are differences in the estimation in which they are held: in Bonai the hill Bhuiyas are considered unclean but the Bhuiyas of the plains are considered to be clean and are employed as domestic servants by men of high caste. In the last census report † an effort was made to give the names and numbers of the "untouchable" castes but great difficulty was experienced in arriving at any reliable conclusion. Twenty-two castes or tribes in Bihar and Orissa ‡ were recorded as "causing pollution by touch or within a certain distance" and these at the present census include about 8,825,000 persons. There are some omissions from this list because it only includes castes or tribes which contribute 1 per mille or more to the population. There are also other omissions of tribes such as the Kandhs, Kharias and Kherwars which seem to be no more respectable than the Mundas or Oraons and with regard to which it is difficult to say why they were not included. Speaking generally however it may be said that not less than one-quarter of the population consists of "untouchables".

4. In recent years a new and even more evasive term, the "depressed classes" has come into common use and these classes are now represented on the provincial Legislative Council. What exactly is included in the depressed classes has never been stated but the term would appear to include a wider range of castes and tribes than the untouchables. If it is taken to include the Hindu "untouchables"

THE DEPRESSED CLASSES.

* It may be mentioned in passing that Jamshedpur is a leveller of caste distinctions in another way also by opening up new careers to talent amongst the depressed classes: it was found at the census that quite a number of Ghasis and other similar low castes were employed by new-comers to India as cooks and domestic servants.

† Census Report on Bengal, Bihar and Orissa and Sikkim, 1911, page 232.
‡ Viz., Bauri, Bhuiya, Chamar, Dhobi, Dom, Dosadh, Ganda, Hari, Ho, Kalwar, Kandra, Kora, Muchi, Munda, Musahar, Nuniya, Oraon, Pasi, Santal, Savar, Sunri, Tiya.

plus the Animists *plus* the Hindu members of tribes which are largely Animistic, the total comes to about 10 millions or something less than a third of the population of the province. It is hardly necessary to say that this estimate makes no pretence to accuracy.

5. If caste was really the outworn institution that has been suggested the census would not have been made the occasion of an attempt to improve the position of various castes or sub-castes in the social scale by assuming high-sounding names and advancing claims to a position in the hierarchy higher than that commonly assigned to them. Although the same interest was not aroused in this subject as was aroused in 1901 and 1911 a considerable number of requests were received asking that new caste names and new castes should be recognized at the census. The general principle followed in dealing with these requests was as far as possible to ascertain and record existing facts; if local enquiry showed that a group of persons was really distinct from the caste to which they had hitherto been supposed to belong and bore a separate name, no objection was made to that name being recorded in the schedules, however it might eventually be classified; but names which suggested that the groups belonged to a higher caste, which usually repudiated them, were not admitted. For instance the Tambulis desired to be recorded as Naghansi Kshatriyas, the Rajbansis desired to be returned as Kshatriyas and the Kurmis represented that they were a sub-caste of the Kurmi-Kshatriya community. These requests were not allowed. The division of the Kaibartta caste into Mahishyas or Chasi Kaibarttas and Jaliya Kaibarttas is a matter of more concern in Bengal and Assam than it is in this province, but a request was received from the Mahishyas, who follow the occupation of agriculture, asking that they should be carefully distinguished from the Jaliyas, whose occupation is the less esteemed one of fishing and boating; while an enthusiastic proselytizer from Murshedabad, in order to enhance the numbers and thereby the importance of the Mahishyas, requested that all Khandaits in Orissa should be returned as Mahishyas. No difficulty was raised with regard to the former of these requests, but the latter was of course refused. The "Vaisya Gopes" of Orissa desired to be returned as Goalas in order to distinguish them from the Gauras; but the name Goala is not an Oriya word at all, so the request was refused though they were informed that there was no objection to their returning themselves as Gopes. The Brahmo Bhats desired to be returned as Brahmans, or, failing that, as Brahmo Bhats, but in no case as Bhats. Instructions were given that they should be described as Brahmo Bhats wherever it was found that they did not inter-marry with or form a part of the same caste as the Bhats, and 1,972 persons were so returned at the census, nearly all of whom were returned from Bihar and the greater number (721) from Muzaffarpur. The Dangis, who had hitherto been classified as Koiris, requested that they might be recorded as Dangis, claiming descent from King Dangi Rai of Nepal and stating that they numbered over 30,000 in the province. The name Dangi was not to be found in any list of the castes of the province, but enquiries showed that they were commonly regarded as a sub-caste of Koiris, from most of whom they differ in not permitting the *sagai* form of widow marriage. The census staff of the districts of South Bihar in which they are found were told that any persons who described themselves as Dangi by caste should be recorded as such, but that the term Dangi Kshatriya should not be allowed. Eventually 5,016 Dangis were recorded of whom 3,469 were enumerated in Gaya. The Dosadhs also have discovered that they are really of Rajput origin. When the Kshatriyas were being massacred by Parsu Ram some of them fled into a jungle to save their lives and being discovered by the enemy they explained that they were not Kshatriyas but "dusra jat"; when they returned to their fellow castemen the latter refused to acknowledge them because they had said that they belonged to a "dusra jat". This name was in due course changed into 'Dosadh jat' by which the caste is known to this day. But the most insistent agitation was made by the Rawani Kahars who desired to be returned as "Chandravanshiya Kshatriyas". The claim was pressed by the "All-India Chandravanishiya (descendants of Maharaja Jarasandha) Kshatriya Maha

"Sabha", an association registered in 1912 under the Indian Companies Act, but enquiries showed that the claim to Rajput status is stoutly denied by the local Rajputs who say that, if the claim of the Rawanis to be descended from Maharaja Jarasandh is correct, they must be the offspring of a Sudra mother, for they have for many years done menial work and been generally regarded as Sudras: moreover the claim to Rajput status in Shahabad is not compatible with a claim to Brahman status which they are said to have advanced in the Moradabad district of the United Provinces. Their request that the term Chandravanshiya Kshatriya should be recognized was therefore refused, but they were told that if they objected to the caste name of Kahar there was no objection of their describing themselves as Rawanis. Actually only 181 slips were found bearing the name Rawani. These instances are cited in order to prove that the upward struggle of the different sections of the Hindu community is still along the lines of caste. The first thought of persons who desire to claim a status higher than that generally accorded to them in the estimation of the public is still to prove that there are no bonds of inter-marriage or inter-dining between them and the caste to which the general public suppose them to belong or that they are connected with some caste, usually the Brahmans or Rajputs, commonly regarded as being above them in the social scale.

6. That caste is still the frame-work of the fabric is shown also by the fact that the attempts at social reform which appear to make the strongest appeal run on caste lines. Many of the lower
 CASTE SABHAS. castes now have "sabhas" or associations to promote their social uplift, some of them more or less spasmodic in their activities while others have regular articles of association, written constitutions and periodical journals. Even the Doms held a meeting at Patna in July 1921 and there highly resolved that they would as a caste abandon the drinking of wine, theft and other despised occupations and that they would have no marital or social relations with any Dom who failed to follow their example. Similarly the Mehtars resolved that their caste should abandon the drinking of intoxicating liquor under penalty of Rs. 5 and that no child of less than three years old should be allowed to marry, while the Dhobis decided to give up meat-eating as well as the drinking of intoxicating liquor. How far these meetings, which were held at the provincial capital, expressed the feelings of the caste as a whole it is impossible to say for the meetings were only of local representatives. The Dosadhs have a more elaborate organization in the shape of the Dushashan Bansiya Kshatriya Maha Sabha founded in 1891 which meets usually once a year, and is attended, it is said by 2,000 or 3,000 persons. There are managing committees in various districts consisting of a president, secretary and members and the president of the all-India Sabha is elected annually. The spread of education among the caste is the first plank in the platform of the association but it also encourages the abandonment of evil practices (especially the drinking of wine and the eating of meat at marriages), the postponement of marriage for boys till the age of 15 and for girls till the age of 10 and the cessation of remarriage both of widows and widowers. But the most important and effective sabha in the province is probably the Gope Jatiya Maha Sabha of the Goalas, or as they prefer to call themselves Ahirs, founded in 1912 and including members from the whole of the north of India from the Punjab to Bengal. The movement which it represents is described as a "Pan-Ahir movement"; sessions are held once a year and are attended by several thousands of persons. The association also has a monthly journal of its own called the *Ahir Samachar* published at Mainpuri in the United Provinces. A considerable body of literature has accumulated in support of the claim of the Ahirs to Kshatriya origin and it is stated that "nothing less than Kshatriya position will satisfy it (the community)". In pursuance of this theory a number of Ahirs have assumed the sacred thread. This action on their part was originally resisted, particularly in North Bihar, by the higher castes such as the Rajputs and the Bhumihar Brahmans and led in some cases to violence and the criminal courts. The Ahirs have also reduced the thirty days' *sraddh* or funeral ceremony prescribed for the Sudras to the twelve days of the twice-born. The

resolutions of this sabha also are directed against the drinking of liquor, child-marriage and such like. The interest shown by the higher castes in resisting the caste claims of the Ahirs has weakened and it is probably owing to this fact that the operations of the Arya Samaj in North Bihar have not been so successful as they promised to be a few years ago, particularly in the Sitamarhi subdivision: only a handful of Aryas were enumerated in the Tirhut Division at the census and Kamtaul in Darbhanga district is the only important centre at which they are found. In South Bihar the Goala movement has been less in the direction of advancing caste claims to wear the sacred thread and so forth and more towards social reform. The men of this caste refused to do *begari* (customary unpaid labour) for their landlords or to permit their women-folk to attend the markets to sell milk and *ghi*: this has on at least one occasion resulted in temporarily disorganizing a bazaar and in causing serious inconvenience to their neighbours. The different sub-castes of Ahirs are now dining with one another and inter-marriage between them is "almost settled". This movement is typical of what is going on in other castes. The Kurmis, the Kahars, the Dhanuks and others are claiming the right to wear and are in some cases wearing the sacred thread. Not that this attitude finds universal favour even amongst the aspiring castes, for a case occurred in Monghyr district in which a Dhanuk who had assumed the sacred thread found that he had thereby deprived himself of the chance of marrying his children into the family of a wealthy caste fellow of more conservative views.

7. The upward tendency is not however confined to the lower castes. Some of the Babbhans or Bhumihar Brahmans are always trying to drop the

ACCURACY OF THE RETURNS. Bhumihar and obtain recognition as full Brahmans, and the decline in the number of

Babbhans and increase in the number of Brahmans in Bihar are probably connected facts. In Bhagalpur some Babhan husbands have recently been able to secure Maithili Brahman girls as wives and they now insist on calling themselves Brahmans. Some of them refused to have anything to do with the census unless they were recorded as Brahmans, a proposition to which the district census officer assented—taking care that the word Bhumihar was added afterwards at the time of slip copying. But it was not always possible to prevent the transfer from Bhumihar Brahman to Brahman. Other cases in which the upward tendency has probably affected the accuracy of the caste figures are the development of Pans into Tantis in Singhbhum, and of Kalus into Telis in Manbhum which will be referred to again in the statistical part of this chapter. In other respects there is no reason to doubt the general accuracy of the caste returns. The enumerators were local men with local knowledge: they could not always be relied on to eschew vague terms such as Baniya or Mallah or Kol, which in most cases are not properly caste names at all but titles which may be applied to several castes, but they could generally be trusted to frustrate any deliberate attempts to misrepresent caste.

8. The effects of the war on the material well-being of the province have been mentioned in the first chapter of this report; its social effects may

EFFECTS OF THE WAR. conveniently be considered at this point. Bihar Orissa supplied 7,270 men to the combatant and

21,621 men to the non-combatant forces during the war. Of the combatants the greater number came from Shahabad (3,352) and Saran (1,603), the districts which in the old days used to be regular recruiting grounds for the Rajput regiments. Of the non-combatants who served in the various labour corps the greatest number came from the Santal Parganas and Ranchi. Recruitment for Europe was closed after some months but labour corps were still required for Mesopotamia and the Indian frontier. Thanks to the generous pay, which was much in excess of the wages that most of the recruits would have been earning in their native villages, many of the coolies returned home with considerable sums of money which has in some cases been squandered but in some has been invested in the land: in Chainpur thana of Ranchi district for instance a good deal of the extension of cultivation is ascribed to war-retained coolies settling down as cultivators and in Ranchi town several

of them have purchased rickshaws which they ply for hire. A fact which deserves recalling is the part played by the aboriginal women in keeping the home fires burning during the absence of their husbands. They insisted on the prompt payment of the family allotments, and there was a case in which a failure in this matter resulted in an honorary recruiter in Ranchi being assaulted and seriously injured by a crowd of angry women: in the Santal Parganas the wives of discharged labourers used to escort them home from the railway stations on their return in order to prevent the occasion being celebrated in the usual hilarious but costly manner at the local liquor shop. As regards the result of their experiences on those men who proceeded to the fronts the universal impression is that it was not so great as might have been expected. No difficulty was experienced with regard to reinstatement into caste after the voyage across the ocean and generally the men seem to have returned to their old pursuits as if they had never been abroad, with nothing to show that the war ever entered into their lives except the khaki half-pants and the ammunition boots. This is not unnatural, for the men were debarred by their ignorance of the languages spoken in France or Mesopotamia from entering into conversation with the inhabitants. They went and returned with men of their own district and though they may have seen the cities of many men they could hardly have learned their minds. The fund of anecdotes in many villages must have been notably enriched, some idea of discipline and *esprit de corps* was acquired and a latent disposition to question the validity of the customs by which their lives are ruled not improbably resulted, but there has been as yet no open sign of any desire to reform or break with those customs. We are still probably too close to the events to estimate the effects of the war upon the men who took part in it.

9. Another point at which the strict caste customs of the past are being modified is the position of women. The increase in the number of females in educational institutions from 36,241 to 67,055 in the last ten years and the increase in the proportion of literate females from 5 to 7 per mille are referred to in chapter VIII.

POSITION OF WOMEN.

Other signs of the general emancipation of the female sex are the increasing interest which they take in business and politics, and at least in Bihar there is no doubt that with the spread of education the *pardah* system is being slowly but surely modified. On the other hand amongst the castes that have social ambitions a tendency can be traced in the opposite direction, towards a more stringent adherence to the traditions of the past: instances of this have already been mentioned in the shape of the discouragement of widow remarriage and the refusal of the Ahirs to allow their women-folk to attend the markets. Signs that woman is coming to be regarded less and less as a chattel may be detected also among the Santals,* where with the more settled conditions of life a strong desire has become apparent that in default of sons property should pass through the female line rather than through the more distant male relatives. In February 1916 a representative meeting of Santals was held at Dumka under the presidency of the Sadr subdivisional officer at which after a long discussion the following resolutions were unanimously passed:—

DAUGHTERS.

(7) If any man has only daughters, they shall after marrying be his heirs, that is to say, their husbands shall get the holding. The father's brothers shall get half the cattle. The person who applied fire to the dead man at cremation shall get a calf. If a daughter, for whom a *ghardi jawae* † was procured, dies without children, the *ghardi jawae* shall get nothing; he shall go away with his calf.

(8) If any man has both sons and daughters and the sons die without leaving children, the daughters shall be heirs, that is to say, their father or brothers may bring

* See also "Some remarks on the position of women amongst the Santals" by Rev. P. O. Boddington in the Bihar and Orissa Research Society's Journal, Vol. II, Part III, page 239 (September 1916).

† A *ghardi jawae* is a son-in-law introduced into a family with the object of procreating children. He does not pay for his wife in money but by personal service and he does not inherit his father-in-law's property, though his children do so.

ghardi jawaes for the daughters, or married daughters may be brought back to their father's house with their husbands.

(3) If any daughter marries other than a *ghardi jawae* she shall not inherit.

(4) If a *ghardi jawae* fails to stay on, his right of inheritance ceases.

(5) If a daughter married to a *ghardi jawae* dies after giving birth to children, her children shall get their mother's heritable right; and the *ghardi jawae* until he marries again shall stay on there and his children shall maintain him. If he remarries, he must go away.

WIDOWS.

If a woman becomes a widow, she is entitled to her support from her husband's house, as long as she lives. If she marries again, her rights in her husband's house cease. A widow may manage her husband's house until she marries again; but when the widow dies or marries again the holding shall belong to her dead husband's brothers or their heirs.

10. In Imperial Table XXI statistics are given which illustrate the extent to which castes are adhering to their traditional occupations and proportional figures will be found in Subsidiary Table II. In the Hindu scriptures the principle that each man should pursue his own proper business is recognized as the essential condition of social life as clearly as in Plato's Republic, and the principle was enforced with severe penalties. The further idea that the children must necessarily follow the professions of their fathers because they were born into a particular caste, irrespective of their natural capacities and inclinations, is one that is being gradually modified with the spread of education and increasing independence of outlook. This process continued slowly during the last ten years. There are certain professions, for instance those of the tanner and the sweeper, in which no Hindu except those of the lowest castes will engage: these occupations are in themselves unattractive, and the spread of education does not make the higher castes willing to take them up; on the contrary the members of the castes condemned by tradition to engage in them become less and less willing to do so and prefer to take up more remunerative and attractive callings. The same repulsion from tasks in themselves unpleasant and regarded as degrading may be observed amongst the aboriginals who, as the result of increasing contact with the Hindu world, are now refusing to do tasks which a few years ago they did without objection. But the more important development is the ever-increasing range of the professions followed by the members of the various castes. Of the Brahmans for instance only one in ten workers now follows the profession of the priest and of those nearly half have some subsidiary occupation. 739 per mille are agriculturists, 26 per mille are domestic servants, 11 per mille are engaged in trade, 7 per mille as field labourers and 6 per mille as general labourers. Over 700 Brahmans were found in the coal-mines as skilled and nearly 1,000 as unskilled labourers: 237 of them were working as miners and 179 as overmen. Even in lac factories, a profession forbidding to the caste, 10 Brahmans were found to be working as skilled and 19 as unskilled labourers. A considerable number of them are also to be found working as fitters in workshops of various kinds: 27 fitters in the mechanical department and 19 in the electrical department in the Tata Iron and Steel Company's works at Jamshedpur are Brahmans; at Jamalpur there are 18 Brahman fitters. The gradual breach with the traditional occupation of this caste is well illustrated in the records of the Chanakya Society which contain notes on the economic condition of particular families prepared during their vacations by the students of Patna College. The following extracts are taken from that source:—

"A (a Brahman) knows something of Sanskrit and is a good astrologer at the same time. He has got 17 *jajmans* of whom three are well-to-do. His son too has some knowledge of Sanskrit, but he has little taste for priesthood and devotes himself to trade. B (A's brother) is quite illiterate. He does

Bhuhinhar which is used for both Bhuiyas and Babhans, but the whole of this table was carefully revised for the Santal Parganas and the figures given are the results of resorting. In the other districts there is nothing to suggest that confusion has arisen on this score and it is difficult to account for the decrease, which is most marked in Hazaribagh, Ranchi and Manbhum, except on the ground that most of the Bhuiyas live on the barest margin of subsistence and would be the first stratum of society to be affected by the troubles of the last few years.

15. After the Goalas, the Brahmans (1,879,226) are the most numerous caste in the province. They are found in the greatest numbers in Darbhanga (274,383), Cuttack (191,476) and Shahabad (188,873) and are fewest in Ranchi (9,250), Singhbhum (8,290) and Angul (3,889). Their proportion to the district population varies from 0·69 per cent. in Ranchi to 10·15 per cent. in Shahabad and 10·98 per cent. in Balasore. Since 1911 their numbers have increased by 153,802 or not quite 9 per cent., the increase being shared by all divisions except Orissa. The increase is probably more a matter of classification than of natural increase, the Bhumi-har Brahmans in particular having apparently succeeded in amalgamating themselves in considerable numbers with the Brahman caste.

BRAHMAN.

16. The Chamars are one of the ten castes of the province that number over 1,000,000 persons and they have increased by 33,000 since 1911. The increase has occurred chiefly in the Patna and Tirhut Divisions especially Saran and Champaran, and in Chota Nagpur, especially Manbhum where there has been a slight, complementary decrease in the number of Muchis. The considerable increase of male Chamars in Saran is probably caused by the decline of emigration, which would naturally inflate the number of males of the labouring castes.

CHAMAR.

17. The number of Doms has decreased by 23,170 or 9·58 per cent., the decrease being general. The caste is most numerous in the Santal Parganas and Manbhum and least numerous in Orissa. They are however found in every district, there being certain functions to be performed in connexion with dead bodies that only a Dom can perform. Wherever therefore the Hindu is, there will the Dom also be found.

DOM.

18. The Dosadh is another of the ten castes that are over a million strong. It is found in the greatest numbers in Bihar, while in Orissa it is not found at all. Amongst the males a slight loss has occurred, while amongst the females there has been a loss of 19,000. This loss is common to North and South Bihar and is most marked in the Bhagalpur Division. This loss can reasonably be ascribed to natural causes, and the true loss amongst the males is probably masked by the decline in emigration from the north of the province.

DOSADH.

19. The Goala is the most numerous caste in Bihar and Orissa, including as it does 3,192,242 persons or 8·4 per cent. of the total population. This figure is less by 58,173 or 1·8 per cent. than the total of the caste in 1911, three-quarters of which loss has occurred amongst the female sex. The caste is most numerous in North and South Bihar, there being 377,000 members of it in Darbhanga district alone. The loss in the total population of Bihar was at the rate of 1·6 per cent. and the loss in this caste is evidently due to natural causes.

GOALA.

20. The Kayasth caste shows a small increase in males and a decrease in females. In North and South Bihar the numbers are stationary or on the decline; but an increase has occurred in Manbhum and Singhbhum, a fact which illustrates the effects of the industrial development of these districts. With the growth of industrial enterprise foreigners have to be imported to staff the clerical establishments which are its natural corollary.

KAYASTH.

21. The decrease in the number of Kewats by 27,626 from 420,506 to 392,880 exaggerates the loss of this caste. The Kewats are fishermen who are found chiefly in Darbhanga and the Bhagalpur and Orissa Divisions. In the districts where the Kewats have lost ground the Mallahs have gained and, as Mallah is a title which is applied to most fishing castes as well as the name of a particular caste, it is probable that most of the loss of Kewats must be set off against the gain in Mallahs. Whatever instructions are issued, it is a matter of extreme difficulty to restrict the use by enumerators at the census of such terms as Baniya and Mallah, which are in common use and generally regarded as caste names.

22. The Hindu Mundas have increased and the Animist Mundas have decreased, the net result being a loss of 44,000 or 10·7 per cent. This loss has occurred principally in Ranchi district and the states. In Ranchi it is accounted for by wholesale emigration and natural loss of population combined with conversions to Christianity; the number of Christians in Ranchi who returned their caste as Munda has increased by over 7,000. In the states the decrease is greatest in Keonjhar, Gangpur and Bonai, and is the result of a different classification of the troublesome entry Kol. In Keonjhar and Bonai the Hos, and in Gangpur the Oraons have gained what the Mundas have lost.

23. The Oraons have lost 27,000 or 5·6 per cent. mostly in the same areas as the Mundas. In Ranchi the same causes have operated. In the states the loss has occurred principally in Bamra where the number has fallen from over 16,000 to 157, owing to a wholesale transfer to Kisan. The marginal statement compares for Bamra, Gangpur and Bonai the figures for Oraons and Kisans at the last two censuses. It is reported that the Kisans in these states are really Oraons, who emigrated many years ago, but as they were returned as Kisans it was thought better on the whole to leave them as such and make a note of the fact that they are ultimately identical with the Oraons.

STATE.	ORAON.		KISAN.	
	1921.	1911.	1921.	1911.
Bamra	157	16,656	20,869	5,708
Gangpur	50,846	46,326	8,088	3,053
Bonai	3,386	3,204	7,597	16

24. The Rajputs, who in point of numbers come sixth in the province, have increased from 1,239,826 to 1,256,906 or by 1·3 per cent. The increase is common to all parts of the province except Tirhut and considering the determined efforts to obtain Rajput status that are being made by a number of castes, it is probable that the increase is a matter of accretion rather than of natural growth. The Khatri caste, which has in the past always proved extremely difficult to distinguish from the Chattris (*i.e.* Rajputs), was not sorted for on this occasion. The Khattris are an up-country caste of traders of whom some 35,000 were enumerated in 1911, a note being recorded that many of them were probably Rajputs. It is very likely that if the Khatri slips had been counted on the present occasion their number would have been considerably reduced.

25. The Santals have increased in numbers in the last ten years by 49,772 or 5 per cent. of which 8,000 have been added in the Santal Parganas. They are now fourth in point of numbers among the castes and tribes of the province. The increase is fairly general in all districts in which the tribe is found. The thrust of the Santals into Purnea continues and their number in that district has about doubled. In Bhagalpur also there has been an increase and in Manbhum, where they have gravitated to the coal-field and where they now number 238,534 or 15·4 per cent. of the district population. In the states

they are found in Mayurbhanj (211,132), Keonjhar (11,763) and Nilgiri (2,340), the three eastern states. The figures given in paragraph 20 of chapter III show how the Santals have increased in Bengal and Assam.

26 The next group of castes are those of local distribution which are included in the second section of Part I of Table XIII. The first of these that calls for notice is the Asurs. There has been a 50 per cent. decrease in this caste in Ranchi district. Since the disturbances amongst the Asurs in Surguja state in 1919 the caste has been dispersed and about half of them have disappeared from the district; the number has fallen from 3,432 to 1,686.

27. The number of the Bhumij tribe is fairly stationary throughout the province except for a marked decrease in the Sadr subdivision of Manbhum district, where it has occurred particularly in the thanas of Chandil, Purulia, Baghmundi and Barahabhum. Here the Bhumij is really a debased section of the Munda tribe. There are few more improvident men than the Bhumij and the decrease is ascribed locally to the manner in which he succumbed to the scarcity of 1919 or emigrated to avoid it. Their favourite occupation of dacoity has also been suppressed during recent years and some of the more daring spirits have emigrated as far as the Andaman Islands.

28. The Chasas have decreased in numbers from 846,119 to 757,342. According to the proverb, "Chasa barhi barhi Mahanti": Mahanti is a title that is used by Chasas, Khandaits and Karans and a good deal of the loss in Chasa is made up by the gain in Khandaits. From the Khandaits there is a further step upwards to the Karans, but that movement is on a small scale and the Karan caste has declined in numbers with the general population of Orissa. It is however common for well-to-do Chasas to describe themselves as Khandaits and intermarry with that caste.

29. A comparison of the figures for Gangai and Ganesh in Purnea district of 1921 with those of 1911 suggests that there has been a transfer of some 12,000 between the two castes, for the Gangautas which are the smaller caste have gained what the Gangais have lost. A complete resorting was however ordered and the result was the figures as printed. In 1901 the Gangais were slightly more numerous and the Gangautas slightly less so than in 1911, but the distribution between the two castes bore a closer resemblance to that of 1911 than to that of 1921.

30. The Hos have increased in numbers to 440,174 by 20,953 or 5 per cent. In Singhbhum where they are most numerous and important there has been a slight increase, but the main increase has occurred in the states, particularly Mayurbhanj, Keonjhar, Bamra and Bonai where it is the result of a different classification of doubtful entries found in the schedules.

31. The number of Kalus shows a great drop in the Santal Parganas and Manbhum from 43,728 to 9,051. This caste is most numerous in Manbhum and it has lost by accretion to the more respectable caste of Telis. "Regarding the general distinction between Kalus and Telis", writes the Additional District Magistrate, "there is little doubt. The Kalu is the indigenous oil-presser whose ancestors have always lived in Manbhum. The Teli is the up-country immigrant. And since immigrants are usually more enterprising and more educated in the general sense of the word, the Telis refuse to recognize the local oil-pressers as members of the same caste. They will not eat with them, nor will they intermarry. Besides the Kalus, however, there is a local caste of Telis, who are not oil-pressers, but cultivators. They style themselves 'Ekadus' or 'Dwadas' Telis, and there is a further tendency to differentiate them from oil-pressers by calling them not Teli but 'Tili'. They claim to be a higher caste than either Kalu or Teli, and this claim is recognized to the extent that Brahmans and other high castes, who will not take water from oil-pressers,

will accept it from their hands. Whether this distinction has its source in any difference of racial origin, or is merely the outcome of the fact that certain Kalus in the past, having amassed wealth and land, and having abandoned their caste trade, have sought successfully to improve their social origin, is not easy to determine; but it undoubtedly exists.* This district has experienced a rapid industrial development, which has brought it, by means of immigration, into touch with a wider world, and, especially of recent years, with more advanced ideas. Many of the disciples of Gandhi and labour agitators have preached the equality of man, and decried the doctrine of untouchability. These factors have given an impetus to a natural tendency, which is almost universal, I believe, for the lower castes to aim at elevating themselves in the social scale: and it must naturally be strongest among those classes which have considerable opportunities of acquiring wealth and such social advancement as does not depend entirely on caste. The result is that the Kalu is rapidly abandoning a caste name which stamps him as inferior in the eyes of both the local cultivator class of Telis, and the immigrant oil-presser Telis".

32. The Mal Paharias of the Santal Parganas have slightly increased in numbers by 1,175 to 39,972 while the Sauria Paharias have decreased by 7,645 to 55,118. Special attention was devoted to the figures of the Paharias: the first step was a complete resorting and then slips containing the doubtful entry "Paharia" without further qualification were classified, tailing other indications, on the basis of a note supplied by the Deputy Commissioner.† Mr. McPherson in his settlement report on the district, which was written before the last census, estimates the number of Mal Paharias at 63,000 and that of the Sauria Paharias at 68,000.

33. The number of Pans shows a great decrease especially in Singhbhum and the states. In Singhbhum there has been a reversion to the state of affairs in 1901 when most of the Pans succeeded in passing themselves off as Tantis. In the states the Pans represent one of the poorest classes of the community. They are found in large numbers in some of the eastern states like Dhenkanal and Talcher which suffered heavy losses of population, and most of the coolies recruited for the tea-gardens from this neighbourhood are Pans.

34. The number of Rajbansis in Purnea, which is the only district in which they are of importance, shows a very great decline since 1911 from 105,750 to 65,931. In 1901 the figures for Koches were included in those for Rajbansis, but at the census of 1911 they were shown as completely separate castes. Nevertheless the figure for Rajbansis on that occasion was greater than the combined figure for Rajbansis and Koches in 1901. In 1911 the total of the Rajbansis consisted of 65,191 Rajbansis, 20,578 Deshis and 19,253 Paliyas.

* A local legend say that all Telis are descended from Manohar Pal and that Ekadas Telis are the offspring of his elder and Dwadas Telis of his younger wife.

† "From my own knowledge of the district I think the following information is very approximately correct:—

1. SUBDIVISION RAJMAHAL.—All the Paharias permanently domiciled there are Sauria Paharias.
2. SUBDIVISION GODDA.—(a) *Damin*.—Paharias in Bungalow Bokrabandh are Mal Paharias. There may be a few Mal Paharias in Bungalow Chandna. In all other bungalows there are only Saurias.
(b) *Ex-Damin*.—Paharias in Thana Poraya are Mal Paharias. In other thanas there are only Saurias.
3. SUBDIVISION PAKAUR.—(a) *Damin*.—In Bungalows Alubera, Dumarchir, Amrapara, Parerkola, Surujbera and Dumria the Paharias are Mal Paharias. In other bungalows they are Saurias.
(b) *Ex-Damin*.—In census Charge No. 40 the Paharias are Mal Paharias; in the rest of the area Saurias.
4. SUBDIVISION DUMKA.—All Mal Paharias.
5. SUBDIVISION DEOGHAR.—All Mal Paharias.
6. SUBDIVISION JAMTARA.—All Mal Paharias.

It must be noted that the distinction between the two tribes is not always marked. On the border country, e.g., Bungalows Litipara and Kunjbona in Pakaur, there are people who call themselves Mal Paharias but who speak Malto and intermarry with Saurias. I came across this and other gradations between the two tribes when I was inspecting census work. Except on the border country however the two tribes appear to be quite distinct".

On the present occasion the Rajbansi total is made up of 55,092 Rajbansis, 10,125 Deshis and 714 Paliyas. Chiefly in order that there might be no mistake about these figures the whole of the Hindu slips in the district were resorted by caste: the only solutions of the disappearance of the Rajbansis that suggest themselves are that the great increase of Rajputs by some 18,000 in this district is accounted for by the fact that many Rajbansis have got themselves recorded as Rajputs on the present occasion and possibly also, since this does not explain the whole difference, that a greater number of persons were returned as Koches than ten years ago: as however the Kochh caste was not sorted for, this suggestion cannot be verified. In Sir Herbert Risley's book on the Castes and Tribes of Bengal, the Koches and the Rajbansis are treated as identical. It should perhaps be added that the slips received from this district were in many cases illegible and in others contained unauthorized caste abbreviations which made it extremely difficult to deal with them in the central office.

35. Amongst the Muhammadan "castes" there is little to note. The Saivids should be properly the descendants of the Prophet, but no one supposes that there are over a hundred thousand persons in the province of that high lineage. The title however is one of honour and there is a strong tendency for the number of Saiyids to multiply more rapidly than the rate of natural increase would permit. As compared with 1911 there has been an increase of 13,149 or 14·4 per cent. The most numerous class in the province is the Sheikhs, who number over $1\frac{1}{2}$ millions, of whom about one-third were enumerated in Purnea. After them in numbers come the Jolahas with over 800,000. In Purnea the Jolahas are insignificant in numbers: they are most numerous in Tirhut, especially Saran (93,193), Hazaribagh (89,533), Gaya (84,452) and the Santal Parganas (84,145). As compared with 1911 there has been an increase of 14,986 Jolahas.

36. Apart from the Indian Christians the most numerous class of Christians are the English; but if the battalion of British infantry at Dinapore be left out of account their numbers are almost the same as those of the Anglo-Indians, *i.e.* persons of mixed descent. It is moreover very difficult to distinguish these two classes from one another. Both are found in every district and usually in very small numbers. There were less than 100 English in 7 districts and between 100 and 200 in 8 others: in Patna there were 1,459, in Manbhum 547, in Monghyr 533, in Singhbhum 517 and in Ranchi 313. The Anglo-Indians number less than 100 in 13 districts, and do not number so many as 1,000 in any one district, Patna with 954 containing the largest number. In Manbhum there are 850, in Singhbhum 625 and in Monghyr 327. In two districts, the Santal Parganas and Cuttack, there are between 200 and 300, in two others, Puri and Purnea, there are between 100 and 200.

37. Only 465 persons in the whole province returned themselves as Scotch and only 329 as Irish. These races are most numerous in the same districts as the English. The communities of Europeans and Anglo-Indians are therefore scattered and small in numbers, the only points of concentration being the provincial capital at Patna, the coal-field in Manbhum, Jamshedpur in Singhbhum and the workshops of the East Indian Railway at Jamalpur in Monghyr. Smaller concentrations are found in the railway colonies at Gaya, Khagaul, Buxar, Sahibganj, Sonpur, Samastipur, Adra, Chakradharpur and Khurda. One hundred and forty-eight Americans were enumerated in the province, most of them at Jamshedpur, and 106 Armenians of whom there is a regular colony employed in the lac factories at Jhalda in Manbhum and a sprinkling in the coal-field. After the British Isles, Belgium is more numerously represented than any other European country, that being the home of a large number of the Roman Catholic priests and sisters found in the province.

SUBSIDIARY TABLE I.—VARIATION IN CASTES, TRIBES, ETC., SINCE 1872.
PART I.—CASTES TABULATED FOR EVERY DISTRICT AND STATE.

CASTE, TRIBE OR RACE.	PER-ONE (000'S OMITTED).						PER-centage OF VARIATION: INCREASE (+) OR DECREASE (—).					PER-centage OF NET VARIATION.
	1921.	1911.	1901.	1891.	1881.	1872.	1911—1921.	1901—1911.	1891—1901.	1881—1891.	1872—1881.	1872—1921.
	2	3	4	5	6	7	8	9	10	11	12	13
HINDU AND ANIMIST.												
BABHAN	970	1,189	1,144	1,221	1,091	1,014	— 10%	— 1%	— 6%	— 18%	— 1%	— 2%
BAISHNAB	70	70	70	71	119	129	+ 0%	+ 10%	— 15%	— 81%	— 9%	— 35%
BANIYA	178	141	110	507	579	244	+ 29%	— 20%	— 2%	— 12%	+ 15%	— 27%
BARAI	100	100	129	119	90	146	— 23%	+ 0%	+ 12%	+ 10%	— 31%	— 31%
BARHI	319	324	304	290	303	245	— 17%	+ 0%	— 4%	— 4%	+ 21%	+ 138%
BELDAB	90	80	100	100	...	90	+ 1%	— 1%	— 1%	...	...	— 3%
BHUIYA	579	604	614	471	410	430	— 13%	— 8%	+ 10%	+ 4%	— 25%	+ 34%
BRABMAN	1,879	1,755	1,706	1,685	1,802	1,323	+ 7%	+ 2%	+ 1%	+ 1%	+ 25%	+ 42%
CHAMAE	1,147	1,114	1,055	1,045	980	758	+ 3%	+ 5%	+ 0%	+ 5%	+ 25%	+ 45%
DHANUK	539	570	579	1,030	531	477	— 5%	— 1%	— 4%	+ 6%	+ 11%	+ 13%
DHOBA	375	377	342	342	322	275	+ 0%	+ 10%	— 0%	+ 6%	+ 16%	+ 135%
DOM	210	242	172	180	180	144	— 9%	+ 40%	— 4%	— 0%	+ 25%	+ 52%
DOSADH	1,168	1,180	1,145	1,173	1,114	941	— 1%	+ 3%	— 2%	+ 5%	+ 18%	+ 24%
GABERI	92	92	97	105	109	91	— 0%	— 4%	— 7%	— 4%	+ 20%	+ 1%
GOALA	3,102	3,250	3,180	3,217	3,045	2,360	— 1%	+ 1%	— 0%	+ 0%	+ 24%	+ 24%
HAJJAM	385	385	379	412	423	325	— 0%	+ 2%	— 7%	— 14%	+ 47%	+ 17%
HALWAI	145	142	141	160	...	144	+ 4%	+ 0%	— 12%	...	...	+ 2%
KAHAB	501	524	517	536	545	431	— 4%	+ 1%	— 3%	— 1%	+ 20%	+ 18%
KALWAR	169	151	221	159	189	...	— 6%	— 15%	+ 10%	+ 0%	...	...
KANAB	476	480	461	454	391	357	— 0%	+ 4%	— 0%	+ 0%	+ 0%	+ 33%
KANDU	481	503	495	507	505	479	— 4%	+ 1%	— 2%	— 14%	+ 24%	+ 0%
KAYASTH	344	345	303	533	357	337	— 1%	— 4%	— 3%	+ 37%	+ 15%	+ 2%
KEWAT	393	421	348	344	249	292	— 6%	+ 20%	+ 1%	+ 35%	— 14%	+ 34%
KOIRI	1,245	1,251	1,249	1,178	1,100	1,039	— 3%	+ 2%	— 0%	— 1%	+ 15%	+ 18%
KUMHAR	520	513	490	493	441	344	+ 3%	+ 10%	+ 0%	+ 5%	+ 25%	+ 53%
KURMI	1,315	1,313	1,242	1,214	1,104	808	+ 0%	+ 3%	+ 2%	+ 0%	+ 25%	+ 48%
MALI	145	140	90	100	121	96	+ 6%	+ 40%	— 2%	— 17%	+ 20%	+ 54%
MALLAH	416	363	303	357	411	330	+ 14%	— 1%	+ 2%	— 13%	+ 24%	+ 25%
MUNDA	367	410	330	352	...	190	— 10%	+ 24%	— 0%	...	...	+ 92%
MUSAHAR	635	627	597	550	544	431	+ 1%	+ 5%	+ 0%	+ 2%	+ 20%	+ 47%
NUNIYA	339	319	297	291	267	223	+ 6%	+ 7%	+ 2%	+ 0%	+ 17%	+ 48%
ORAON	447	475	472	443	...	293	— 5%	+ 0%	+ 5%	...	...	+ 114%
PASI	150	150	142	143	159	123	— 0%	+ 6%	— 1%	— 10%	+ 20%	+ 19%
RAJPUT	1,257	1,240	1,250	1,303	1,291	1,120	+ 1%	— 2%	— 0%	+ 6%	+ 15%	+ 12%
RAJWAR	109	132	143	127	111	79	— 17%	— 0%	+ 14%	+ 15%	+ 39%	+ 37%
SANTAL	1,469	1,399	1,302	1,152	...	753	+ 5%	+ 2%	+ 10%	...	...	+ 57%
SONAR	191	212	187	216	197	194	— 10%	+ 13%	— 13%	+ 9%	+ 1%	— 1%
SUNRI	251	257	185	223	200	330	— 2%	+ 3%	— 15%	+ 11%	— 44%	— 30%
TANTI	603	613	634	494	338	431	— 1%	— 3%	+ 25%	+ 47%	— 37%	+ 30%
TELI	1,077	1,072	991	1,098	907	710	+ 6%	+ 8%	— 1%	+ 11%	+ 27%	+ 51%
MUHAMMADAN.												
DHUNIA	136	202	195	183	...	...	— 3%	+ 3%	+ 1%	...	...	...
JOLAH	841	836	795	609	...	69	+ 1%	+ 4%	+ 30%	...	...	+ 1,124%
KUNJRA	165	159	170	127	...	...	— 13%	+ 10%	+ 34%	...	...	...
PATHAN	237	221	208	220	...	121	+ 3%	+ 6%	— 4%	...	...	+ 187%
SAIYID	104	91	116	115	...	56	+ 14%	— 21%	+ 9%	...	...	+ 88%
SHEIKH	1,699	1,709	1,619	2,139	...	839	— 0%	+ 5%	— 25%	...	...	+ 102%

Only those castes in Imperial Table XIII, Part IA are shown above which contribute more than 2 per mille (or 75,000) of the population of the province.

SUBSIDIARY TABLE I.—VARIATION IN CASTES, TRIBES, ETC., SINCE 1872.
PART II.—CASTES TABULATED FOR CERTAIN AREAS ONLY.

CASTE, TRIBE OR RACE.	AREA FOR WHICH TABULATED.	PERSONS 000'S OMITTED.						PERCENTAGE OF VARIATION; INCREASE (+) OR DECREASE (—).					PERCENTAGE OF NET VARIATION.
		1871.	1911.	1901.	1891.	1881.	1873.	1911-1921.	1901-1911.	1891-1901.	1881-1891.	1872-1881.	1872-1911.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
BAURI ...	Santal Parganas, Cuttack, Puri, Manbhum.	270	257	270	270	214	169	— 6'0	+ 2'5	+ 3'3	+ 20'2	+ 7'2	+ 35'3
BHANDARI ...	Orissa Division and Orissa States.	111	117	101	93	...	...	— 4'0	+ 15'5	+ 8'4	...	...	...
BHUMIJ ...	Cuttack, Balasore, Manbhum, Singhbhum, Orissa States, Chota Nagpur States.	240	272	244	235	164	162	— 11'6	+ 11'2	+ 3'8	+ 43'7	+ 1'3	+ 24'4
BIND ...	Patna, Tirhut and Bagalpur Divisions.	184	134	116	117	122	111	+ 7'4	+ 15'3	— 7'1	— 4'3	+ 10'6	+ 21'2
CHASA ...	Orissa Division and Orissa States.	757	848	842	662	591	433	— 10'5	+ 4'3	+ 3	+ 27'1	+ 7'7	+ 56'6
GANDA ...	Sambalpur and Orissa States...	225	212	...	...	...	...	+ 6'3	...	...	...	...	...
GANGAUTA ...	Bhagalpur Division	91	83	80	...	...	70	+ 10'4	+ 3'3	...	...	...	+ 28'6
GAURA ...	Orissa Division and Orissa States.	747	710	430	431	429	276	+ 5'2	+ 65'1	— 1'5	+ 2'9	+ 62'3	+ 171'2
GOND ...	Sambalpur, Ranchi, Singhbhum and Orissa States.	224	224	47	21	21	29	+ 19	+ 402'0	+ 126'7	— 1'6	— 26'6	+ 733'0
GONZALI ...	Champaran, Mazharapur, Darbhanga and Bhagalpur Division.	65	129	133	141	...	82	— 26'8	— 2'3	— 6'2	...	...	+ 15'3
GURIA ...	Orissa Division and Orissa States.	140	147	140	132	...	...	— 4'0	+ 5'2	+ 6'1	...	...	...
HABI ...	Bhagalpur Division, Cuttack, Balasore, Angul, Puri, Manbhum and Orissa States.	104	110	116	224	87	47	— 10'5	— 4'3	— 4'3	+ 156'6	+ 64'2	+ 119'0
HO ...	Singhbhum, Orissa States and Chota Nagpur States.	440	410	363	147	...	...	+ 5'1	+ 9'3	+ 1'0	...	...	...
KAIBARTTA ...	Purnea, Santal Parganas, Balasore, Manbhum, Angul, Puri, Sambalpur and Orissa States.	79	83	73	49	61	63	— 3'8	+ 13'6	+ 47'6	— 10'0	— 2'5	+ 26'2
KANDH ...	Orissa Division and Orissa States.	387	303	122	103	...	...	— 5'1	+ 148'5	+ 17'8	...	...	...
KANDRA ...	Orissa Division and Orissa States.	142	155	151	140	131	102	— 8'7	+ 2'0	+ 7'8	+ 16'1	+ 17'8	+ 38'2
KARAN ...	Orissa Division and Orissa States.	138	146	137	120	103	113	— 5'8	+ 6'5	+ 6'3	+ 25'5	— 9'2	+ 21'5
KHANDAIT ...	Orissa Division and Orissa States.	623	767	690	613	611	448	+ 7'1	+ 11'3	+ 4'0	+ 8'5	+ 36'5	+ 83'6
KHARJA ...	Sambalpur, Ranchi, Manbhum, Singhbhum and Orissa States.	90	105	57	45	...	29	— 14'1	+ 94'0	+ 26'5	...	...	+ 214'9
KHARWAR ...	Shahabad, Bhagalpur, Purnea, Ranchi and Palamau.	60	83	71	78	96	50	— 3'4	+ 17'4	— 9'7	— 18'8	+ 80'2	+ 61'5
KHATWE ...	Muzaffarpur, Darbhanga, Bhagalpur and Purnea.	110	116	101	80	...	51	— 5'1	+ 14'5	+ 26'2	...	...	+ 115'7
KOLTA ...	Sambalpur and Orissa States...	136	123	...	...	...	...	+ 8'2	...	...	...	...	...
PAN ...	Orissa Division, Ranchi, Singhbhum, Orissa States and Chota Nagpur States.	351	463	438	340	241	242	— 24'2	+ 5'8	+ 36'7	+ 41	— 7'3	+ 45'5
SAVAR ...	Cuttack, Puri, Sambalpur and Orissa States.	203	216	29	...	...	...	— 6'2	+ 635'4	...	...	...	...

Only those castes in Imperial Table XIII, Part II, are shown which contribute more than 2 per mille or 76,000 of the population of the province. The figures for previous censuses relate only to those areas for which the castes were tabulated on the present occasion.

SUBSIDIARY TABLE II.—PROPORTION OF MEMBERS OF CASTES FOLLOWING THEIR TRADITIONAL OCCUPATIONS.

GROUP AND CASTE.	PERSONS (000'S OMITTED).	GROUP AND CASTE.	PERSONS (000'S OMITTED).	GROUP AND CASTE.	PERSONS (000'S OMITTED).
1	2	3	4	5	6
CULTIVATORS—		VI.—WEAVERS—		XI.—OIL PRESSERS—	
Babhan (Bihar) ...	323	Jolaha ...	101	Teil ...	170
Chasa (Orissa) ...	115	(Bihar) ...	49	(Bihar) ...	103
Korri ...	523	(C. N. Plateau) ...	52	(Orissa) ...	24
(Bihar) ...	474	Tamli ...	64	(C. N. Plateau) ...	52
(U. N. Plateau) ...	49	(Bihar) ...	19		
Kurmi ...	290	(Orissa) ...	35	XII.—GRAIN PARCHERS—	
(Patna and Tirhut Divisions) ...	234	(Orissa States) ...	10	Kandh (Bihar) ...	46
(Hazratbagh) ...	58				
Rajput ...	390	VII.—HIDE DRESSERS—		XIII.—WASHERMEN—	
(Bihar) ...	363	Chamar ...	85	Dhoba ...	135
(U. N. Plateau) ...	46	(Bihar) ...	63	(Orissa) ...	35
		(Orissa) ...	6	(C. N. Plateau) ...	33
HERDSMEN AND MILKMEN—		(C. N. Plateau) ...	16		
Gaura (Orissa) ...	51	VIII.—CARPENTERS—		XIV.—BARBERS—	
Goala (Bihar) ...	321	Barhi ...	51	Hajjam ...	85
		(Bihar) ...	37	(Bihar) ...	6
FISHERMEN—		(Orissa and Hazratbagh) ...	14	(Hazratbagh) ...	
Kewat ...	55			XV.—PRIESTS—	
(Bihar) ...	3	IX.—BLACKSMITHS—		Brahman ...	131
(Orissa) ...	35	Ka ...	51	(Bihar) ...	81
(C. N. Plateau) ...	46	(Orissa) ...	6	(Orissa) ...	19
Malah (Bihar) ...	51	(C. N. Plateau) ...	45	(C. N. Plateau) ...	21
SALT-PETRE REFINERS—				XVI.—WRITERS—	
Nunja (Bihar) ...	53	X.—POTTERS—		Karan (Orissa) ...	7
		Kumhar ...	163	Kayas ha (Bihar) ...	37
GORTON CLEANERS—		(Bihar) ...	20		
Dhanis (Bihar) ...	8	(Orissa) ...	21	XVII.—LABOURERS—	
		(U. N. Plateau) ...	62	Doodh ...	252
				(Bihar) ...	238
				(C. N. Plateau) ...	14

CHAPTER XII.

OCCUPATIONS.

Columns 9 and 10 of the census schedule relate respectively to the principal and subsidiary occupations of actual workers and column 11 to the means of subsistence of dependants, *i.e.*, the occupation of the person who supports them. These columns have grown to their present shape as the result of experience. In 1881, when occupation was first tabulated, only the occupation of workers was returned : in 1891 it was decided to record means of subsistence rather than occupation, and dependants were included as well as workers but without being distinguished from them. The present practice of distinguishing workers and dependants was introduced in 1901 and has since been maintained. The workers, it may be mentioned, include not only persons who work for their living but persons who live on rent or income derived from investments and persons who have ceased to work and are now living on pensions. The dependants therefore are the children, the women and the old and infirm who have to look to others for their support, a worker being distinguished from a dependant by the fact that he or she " helps to augment the family income ".

2. Like the occupation columns themselves, the scheme of occupations or system on which the occupations are grouped is itself the result of experience.

THE OCCUPATION COLUMNS. In 1881 the English scheme was adopted with a few minor modifications, but it proved unsuitable to Indian conditions and an entirely new scheme was devised and substituted in 1891 which included in all 478 groups. In 1901 this scheme was overhauled and expanded with the result that the number of groups rose to 520. Experience had however by this time shown that such an elaborate classification was not only not required in the circumstances of India, but was liable to be actually misleading. In 1911 therefore an elaborate revision took place and a practically new scheme based on a scheme approved by the International Statistical Institute was introduced, consisting of 4 classes, 12 sub-classes, 55 orders and 169 groups. This scheme has been substantially followed on the present occasion. The development of flying since 1911 has however led to the insertion of two new orders (Nos. 19 and 43) for which room has been made by combining two pairs of what were in 1911 separate orders, *viz.* old orders 18 and 19 in new order 18 and old orders 40 and 41 in new order 40. A new order 56 has also been added for other unclassified, non-productive industries. The groups, which form the *infima species*, have also been modified in two directions :—

- (1) by dividing up the existing groups so as to show in detail interesting or important categories which were previously combined, the number of groups increasing accordingly from 169 to 191 :
- (2) by redrafting the titles of the groups in a few cases and transferring certain categories from one group to another, particularly in order 50 (letters and arts and sciences).

The complete scheme is given in the appendix to this chapter.

3. The statistics of occupations classified in accordance with this scheme, with full details of groups will be found in Imperial Table XVII, which corresponds to Imperial Table XV, Part A of 1911, and consists of two parts, *viz.*, Part A, a provincial summary which gives details group by group for British territory, the Feudatory States and cities, and Part B which gives details for separate districts omitting a few of the less important groupes : the latter in spite of these omissions is a form of over 1,000 columns and extends to 57 pages. The same data are arranged by religion in Imperial Table XX but without the distinction of worker and dependant. Imperial Table XVIII consists of three parts which show respectively the subsidiary occupations of the three

OCCUPATION TABLES.

important classes of persons supported by agriculture, *viz.*, rent-receivers, rent-payers and farm servants and field labourers. The slips of a few selected castes with well-defined traditional occupations were also examined to see how far those occupations are maintained and with what other occupations they are commonly combined, and the results are exhibited in Imperial Table XXI A. Imperial Table XXI B shows the different castes engaged in certain selected occupations. The following Subsidiary Tables relating to occupations are given at the end of the chapter :—

Subsidiary Table I.—General distribution by occupation.

Subsidiary Table II.—Distribution by occupation in Natural Divisions.

Subsidiary Table III.—Distribution of agricultural and industrial population.

Subsidiary Tables IV and V.—Occupations combined with agriculture.

Subsidiary Table VI.—Occupations of females.

Subsidiary Table VII.—Selected occupations, 1911 and 1921.

Subsidiary Table VIII.—Occupations of selected castes.

Subsidiary Table IX.—Number of persons employed on railways, in the post office and in irrigation.

Subsidiary Table X.—Number of lac-growers and number and kind of trees on which lac is grown.

Subsidiary Table XI.—Number of hand-looms at work.

Subsidiary Table XII.—Age, occupation and principal birth-places of the most numerous castes in the Jherria coal-field.

4. In 1901 an attempt was made to distinguish between workers in factories and those engaged in hand industries on the basis of the entries in the census schedules. The attempt failed but, as the rapid industrialization of certain parts of the country made it increasingly important to know the number of persons employed in factories of different kinds, a separate return was prescribed in 1911 for factories, mines, tea-gardens and other similar concerns in which not less than 20 persons were employed, to show the name and caste or nationality of the owner and manager, the number of persons employed in direction, supervision and clerical work, the number of skilled and unskilled workmen, the mechanical power, if any, employed and the state of business on the date of the census. This return was again called for on the present occasion with amplifications; it was prescribed for all industrial establishments containing 10 or more persons, an industrial establishment being defined as “any premises wherein or within the precincts of which ten or more persons are employed on separate remuneration in any process for making, repairing, ornamenting, finishing or otherwise adapting for use, for transport or for sale any article or part of an article. It does not include such industries as are carried on by members of a household in their joint interest with less than ten hired labourers”. The object of this definition was to include any establishment of the nature of a factory, whether power is employed or not, where labour is concentrated under a definite management and paid by definite, individual remuneration, and to exclude cottage or family industry where the work is done in the house by members of a family and profits are shared in the family. On all such industrial establishments two forms were served, in the first of which information was sought regarding (1) the nature of the business, (2) the number, sex and race or nationality of the owners or, in the case of a limited company, of the directors, (3) the race or nationality of the manager, (4) the number and sex of the supervising, technical and clerical staffs, distinguishing Europeans and Anglo-Indians from Indians and other Asiatics, (5) the number and nature of the power-engines, (6) whether the industry was perennial or seasonal, and (7) the number of looms in textile establishments. The second return related to the labour force, *i.e.*, to “operatives, skilled and unskilled, including

foremen, mates and mukaddams who are of the same general class as the operatives under them". With regard to every such person information was requested regarding (1) name, (2) sex, (3) age, distinguishing adults from children of under 14 years of age, (4) race or caste, (5) birth district, (6) whether skilled or unskilled and, (7) in the case of skilled operatives, the occupation. These forms were placed in the hands of the agents or managers of all establishments at least a month before the date fixed for their return, which was April 1st 1921 for all kinds of establishment except lac factories for which the date was May 1st.

5. The statistics so obtained were compiled and are presented in the seven parts of Imperial Table XXII. which are as follows :—

INDUSTRIAL TABLES.

- Part I.—Industrial statistics : provincial summary.
- Part II.—Industrial statistics : distribution by districts.
- Part III.—Industrial establishments classified according to the class of owners and managers.
- Part IV.—Caste or race and birth-place of skilled workmen classified according to their industry and occupation.
- Part V.—Caste or race and birth-place of unskilled labourers classified according to the industry in which they are working.
- Part VI.—Details of power employed.
- Part VII.—Number of looms in use in textile establishments.

At the end of the chapter the following Subsidiary Tables relating to industrial establishments will be found :—

- Subsidiary Table XIII.*—Distribution of industries and persons employed.
- Subsidiary Table XIV.*—Particulars of establishments employing twenty or more persons in 1911 and 1921.
- Subsidiary Table XV.*—Organization of establishments.
- Subsidiary Table XVI.*—Place of origin of skilled employés.
- Subsidiary Table XVII.*—Place of origin of unskilled labour.
- Subsidiary Table XVIII.*—Distribution of certain races in certain industrial establishments.
- Subsidiary Table XIX.*—Proportional distribution of adult women and of children of each sex in different industries.
- Subsidiary Table XX.*—Distribution of power.

The industrial statistics will be discussed in the second part of this chapter.

6. To revert to the occupations returned in the general census of the population, the instructions for filling up column 9 of the general schedule were as follows :—“ Enter the principal means of livelihood of all persons who actually do work or carry on business, whether personally or by means

INSTRUCTIONS FOR RETURNING
OCCUPATIONS.

of servants or who live on house rent, pension, etc. Enter the exact occupation and avoid vague terms such as ‘service’ or ‘writing’ or ‘labour’. For example in the case of labour say ‘labour in the fields’ or ‘in coal-mine’ or ‘jute factory’ or ‘cotton mill’ or ‘lac factory’ or ‘earth-work’, etc. In the case of agriculture distinguish between persons who receive rent and those who pay rent. If a person makes the articles he sells he should be entered as ‘maker and seller’ of them. Women and children who work at any occupation which helps to augment the family income must

be entered in column 9 under that occupation.....". In column 10 was to be entered "any occupation which actual workers pursue at any time of the year in addition to their principal occupation. Thus, if a person lives principally by his earnings as a boatman but partly also by fishing, the word 'boatman' will be entered in column 9 and 'fisherman' in column 10.....". In regard to column 11 the instructions were as follows:—"For children and women and old or infirm persons who do not work either personally or by means of servants, enter the principal occupation of the person who supports them". The bare sight of the instructions for filling up the occupation columns of which the substance has been set out above is sufficient to strike alarm into the reader particularly if he is not conversant with the use of forms. It is probable that after the infirmity statistics, which in many cases must have been deliberately falsified, the occupation statistics are the least reliable part of the census, owing not to deliberate misstatement but to the difficulty of understanding and applying the instructions. It was the general experience of the district census officers that columns 9 to 11 gave more trouble than all the other columns put together. Subtle distinctions between workers and dependants and between principal and subsidiary occupations led to many hours of argument and explanation: in the circumstances of an Indian household, where children from their earliest years often assist in herding the cattle, it can never be easy to say exactly which members of the family do and which do not help to augment the family income, nor can it be easy in families in which domestic accounts are unknown and which have hitherto defied the inquisition of the family budget-maker to decide in every case of dual occupations which is principal and which subsidiary. Apart however from the inherent difficulty of compressing an adequate account of the occupations of a family into the occupation columns, the repeated injunctions to be definite were not always followed. The dimensions of order 53 (general terms which do not indicate a definite occupation) which includes all told 1,319,747 persons, most of them unspecified labourers, is a fair index of the ill success that attended the warfare against vagueness.

7 The difficulty of getting the columns correctly filled up was however only the beginning of evils. The correct copying of lengthy entries in these columns needed close supervision in the slip-copying offices and their correct sorting in the central offices required a supervision even closer. The sorting by occupation is the most intricate and difficult of all and the impetuosity of sorters, who were paid by the thousand slips sorted, required constant checking: in the case of three districts the work had practically to be done twice over. The next stage was the allocating of the results produced by the sorters to their proper groups. The Census Commissioner for India issued a printed index of occupations which was of the greatest assistance in this matter: there were also alphabetical lists of transliterated vernacular words prepared in the central offices at the last census for use at this to which additions were made as new entries were found, but these lists were not so generally used as the Census Commissioner's index, which extended to 78 pages of print and included all entries that are likely to be found in the schedules. It did not of course include local names for the different kinds of interest in agricultural land but a separate list of these was prepared for the province and circulated to the Deputy Superintendents for guidance. The main work of reference was however undoubtedly the Census Commissioner's index, and a few words may be said regarding the principles on which it was compiled. The occupation of any worker may be looked at from two points of view. A clerk may be employed in a Government office, or in a landlord's cutcherry or as a goods clerk at a railway station or in a coal-mine or in a hundred other different kinds of office. His personal occupation is in every case that of a clerk and for certain purposes that is the important fact; from the point of view for instance of public health or for calculating the expectation of a man's life his personal occupation is of greater importance than the nature of the office or works in which he is employed. But to obtain a general synopsis of the economic distribution of the population or to ascertain the number of persons dependent on a particular industry, it is the nature of the office or

works and the purpose which it serves that matter : the clerks for instance in the office of the Tata Iron and Steel Company at Jamshedpur are supported by the iron and steel industry no less than the furnace helpers or the general manager. The instructions with regard to column 9 are intended to cover both personal occupation and industry, but in compilation the principle followed was to classify by industry as far as possible : clerks, contractors, coolies, engineers, managers, mechanics, overseers and such like were allocated to their proper industries where the necessary information was available and order 53 (general terms which do not indicate a definite occupation) was only used in cases where the entry in the schedule was so vague as not to allow of its being so allocated. The following note explains the other main principles of classification :—

“(1) Where a person both makes and sells he is classed as a ‘maker’. On the same principle, when a person extracts some substance, such as saltpetre, sulphur, carbonate of soda, etc., from the ground and also refines it, he is shown in sub-class II—Exploitation of Minerals, and not in sub-class III—Industry.

(2) Industrial and trading occupations are divided into two main categories :—

(a) those where the occupation is classified according to the material worked in, and

(b) those where it is classified according to the use which it serves.

As a general rule the first category is reserved for the manufacture or sale of articles the use of which is not finally determined, but it also includes specified articles for which there is no appropriate head in the second category. For example, while shoe-makers are included in the second category (order 13, group 78), the makers of water-bags, saddlery, leather portmanteaux and the like are included in the first category (order 7, group 40).

In a few cases occupations have been classed according to the material worked in, even though certain articles made of it are specified, because the material used is more characteristic of the occupation than the article made. Thus, makers of palm-leaf fans have been shown in group 45 rather than group 100. Makers of bamboo screens, leaf plates, etc., have also been shown in group 45.

(3) Persons employed in railway carriage factories have been shown in group 118 instead of under order 16, because these factories in India are always worked direct by the railways. The manufacture and repair of railway trucks and carriages is an integral part of the operations of the railway authorities. The principle on which the classification is made is analogous to that followed in the case of makers and sellers or diggers and refiners.

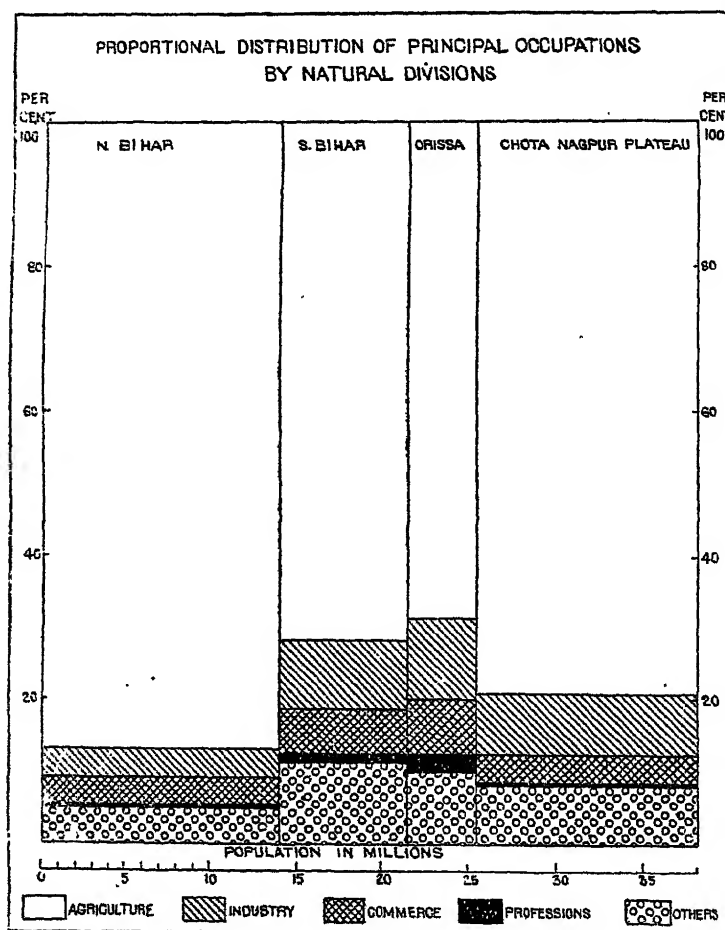
(4) on the other hand, railway police and railway doctors are classified in group 159 and 171 respectively, because the primary duty of persons thus employed is in the one case the prevention and detection of crime and in the other the healing of disease. The fact that their pay is derived from the railway is merely an incident, and does not effect the character of the occupation.

As a general rule it may be said that wherever a man's personal occupation is one which involves special training, *e.g.*, that of a doctor, engineer, surveyor, etc., he is classed under the head reserved for that occupation. Exceptions have been made, however, in cases where the work in which he is employed involves further specialization. For this reason a marine engineer is classed in group 107 and a river surveyor in group 108. Officers of Government whose occupation is covered by some other group (*e.g.*, doctors, clergymen, professors, postal, forest, settlement and railway officers and other establishments, etc.), will be included in that group and not under group 161. Government peons and chaprasis, other than those in the above mentioned establishments, will be included under this group and not in group 117 ”.

Finally even when the entries had been classified there were still two further processes of posting and compiling in voluminous intermediate registers through which the data had to be passed before they issued in their final form in Tables XVII, XVIII and XX. It will be realized that, when the totals of the 191 groups had been added up for the district and the result tallied with the population of the district, a sigh of relief was heard in the compilation office.

8. The general distribution by occupations of the population of the province is given in Subsidiary Table IV and summarized in the following table and diagram :—

				Bihar & Orissa.	North Bihar.	South Bihar.	Orissa.	Chota Nagpur Plateau.
Agriculture	...	...	...	80	87	72	69	80
Industry	...	...	...	7	4	9	12	8
Commerce	...	...	...	5	3	7	7	3
Professions	...	...	...	1	1	1	2	1
Others	...	...	...	7	5	11	10	8
				100	100	100	100	100



In the following paragraphs the occupations are dealt with in the order in which they appear in the scheme of occupations.

9. Agriculture is by far the most important occupation, supporting as it does over 30 millions of people or four-fifths of the total population. North

AGRICULTURE.

(Groups 1-5).

Bihar with 87 per cent. of agriculturists is the most purely agricultural part of the province and Orissa with 69 per cent. is the least so. The proportion of agriculturists as compared with ten years ago shows an increase in North Bihar and Chota Nagpur and a decrease in South Bihar and Orissa : in the province as a whole there is an increase of 2 per cent. The next most important class of occupations, but at a very long interval, is industry which supports 7 per cent. of the population while commerce supports only 5 per cent. and professions only 1 per cent. In addition to the general increase of agriculturists there has been some reshuffling among the different groups of agriculturists contained in this order, rent-payers or ordinary agriculturists having increased by 9 per cent. while rent-receivers or landlords have declined by 45 per cent. and farm servants and field labourers by 22 per cent. At the last census the occupation of the landlords was described in the vernacular

as *lagan* or *malguzari lena* and that of the cultivators as *lagan* or *malguzari dena*, expressions alien to the ordinary language of the village which were very troublesome to explain to the staff. The distinction which it is really desired to draw is that between persons who live on the rent of agricultural land and those who cultivate themselves and therefore at the present census the occupation of landlords was ordinarily described by some such word as *zamindari* and that of cultivators as *kheti* or *kashthari*. It is probable that many of that very large body of persons who are both landlords and tenants were content to describe themselves at this census as *kashthars* who ten years ago had fancied themselves rather as receivers than as payers of rent. The differences between one class of agriculturists and another are subtle and it is often difficult to fit them in with the hard and fast distinctions that the census recognizes. The decrease in farm servants and field labourers is due partly to an increase in the number of labourers unspecified (group 187) from whom in the great majority of cases they do not really differ, as will be explained presently, but ordinary cultivation has absorbed the rest. The increase of cultivators is most marked in Chota Nagpur and above all in Ranchi where it amounts to 386,000. Enquiry shows that the most important cause of this increase in Ranchi is the settlement, the full effects of which had not been felt in 1911 and which has resulted in many persons who were previously regarded as landlords' servants finding themselves in possession of lands of their own and so promoted to the group of rent-payers. The number of farm servants and field labourers in this district has decreased by 40,000 and that of labourers unspecified by 125,000. There has also been reclamation of jungle land and extension of cultivation which is very marked in some parts of the district such as Chainpur and Pithoria: many of the coolies who returned from the labour corps as independent gentlemen have invested their savings in this manner. There has also been a marked decrease in the number of persons returned as following the primitive pursuits of fishing and hunting and cutting and collecting wood while the village artisans are said to be devoting more attention to agriculture than before. These causes probably apply also *mutatis mutandis* to the other districts of Chota Nagpur. Elsewhere in Bihar the increase in cultivators is probably due chiefly to the change in the terms used to describe the classes of agriculturists though the high prices of food-grains so far as they affected the number of agriculturists must have tended to increase it. That the increase is not incompatible with a development in the organized industries of the province is shown by the figures given in paragraph 49 below.

10. The decrease in the number of indigo-growers in North Bihar is due to the fact that many of the so-called 'factories' have now abandoned the

SPECIAL PRODUCTS AND FORESTRY.

(GROUPS 6—9).

cultivation and manufacture of indigo altogether, while others combine it with the cultivation of other crops so that the persons who cultivate it would not describe themselves as primarily cultivators of indigo. The decrease in forestry is due principally to the reduction already noticed in the number of wood-cutters and collectors in Chota Nagpur. The importance of the lac-growing and collecting is altogether obscured by the census figures

11. India possesses a virtual monopoly of the lac trade* and some of the most important centres in which lac is grown or shellac is manufactured

LAC.

(GROUP 10).

are in this province. In view of the local importance of the industry the opportunity of the census was taken to collect on a separate form statistics with regard to the number of lac-growers and the number and variety of trees cultivated. The results will be found in Subsidiary Table X at the end of this chapter.

12. The lac trade is subject to violent fluctuations. The London prices of shellac fluctuate in accordance with the stocks held in London and the reported prospects of the Indian crop; these prices affect the Calcutta prices and they in turn affect the price of stick lac in the up-country markets. Lac is generally cultivated by small cultivators as an occupation subsidiary to their main occupation of agriculture: the ordinary lac-grower takes the

* Cf., REPORT ON LAC AND SHELLAC, by Messrs. Lindsay and Harlow (Indian Forest Records, Vol. VIII, Part I).

lease of a few trees from the landlord and cultivates his crop of lac upon them. The trees are usually scattered and the task of protecting them against theft is a troublesome one; if the price of stick lac is low, the grower will not think it worthwhile to cultivate a crop at all and so it comes about that the supply of lac is closely regulated by the demand. During the slump that occurred before the war much of the lac cultivation in the hills south of Jhalda in Manbhum was abandoned and many valuable *kusum* trees were cut down and used as fire-wood. This must be borne in mind in examining the results of the census of lac-growers and trees and also the entries in groups 10 and 64 (i) of Table XVII. The few previous years had been years of violent fluctuations: by 1916 a steady demand for shellac for the inner coatings of shells and other military purposes had arisen; the London stocks had fallen, prices had risen and Government control became necessary. The Calcutta price of T. N. shellac which had been Rs. 23 a maund in July 1915 rose steadily to Rs. 97 a maund in January 1919. After that with the removal of Government control prices at first fell but subsequently, as the various industries in which shellac is used revived after the war, the Calcutta price soared and reached the unprecedented height of Rs. 258 a maund in January 1920. That year there was a bumper crop and prices came tumbling down again; there was the inevitable slump and by January 1921, when the census of lac trees was taken, the Calcutta price stood at Rs. 90. The results of the census of lac-growers and lac trees are therefore smaller than they would have been if it had been taken twelve months before.

13. The table shows that there were in the province 311,866 persons cultivating lac on 6,062,264 trees. The greatest number of lac-growers is to be found in Manbhum (83,651): and next come Singhbhum (63,201), Palamanu (41,019), Ranchi (39,555) and the Santal Parganas (32,144) in that order. No lac is grown in the coastal districts of Orissa and very little north of the Ganges except in Purnea: in fact Bihar has little to show in the way of lac cultivation except in the south of Gaya district. In the states lac is at present cultivated most extensively in Mayurbhanj; but there is no doubt that, as the railway system expands in this area, the cultivation of lac will grow with it. The statistics with regard to the trees are not altogether reliable, round numbers occurring in a number of the forms which are evidently the result of guess work. The best lac is grown on the *kusum* tree and of these the greatest number is cultivated in Manbhum, though many are cultivated in Ranchi also. The kind of tree which is in most common use for lac cultivation is however the *palas*, which in Chota Nagpur is frequently found growing in considerable numbers near human habitations where the crop of lac can be easily watched. But apart from its use as a host for the lac insect *palas* can only be used as fuel and it is likely that the *bair*, which is the next most numerous tree according to the census and which has an alternative value as a fruit producer, will tend to oust the *palas* in course of time. The *pipal*, which is protected by religious scruple, is cultivated on a much less extensive scale: its use for this purpose is practically confined to Manbhum, Singhbhum and Ranchi.

14. The lac cultivator, who does not cultivate on the trees in his home-stand land, hires his trees from the landlord and the rent is fixed after inspection of the lac crop: it varies from $\frac{1}{2}$ to 3 annas for a *palas* tree and from 2 annas up to as much as Rs. 2 for a *kusum* tree. The cost of the brood lac is estimated at 2 annas a tree and there are further expenses connected with the watching of the crop. The importance of this industry as a secondary means of support for the cultivators of Chota Nagpur is shown by the fact that, when the rains failed in 1918, the agricultural classes in various districts of Chota Nagpur had resources to fall back upon in the shape of savings from the high prices they had been receiving from lac since the war began. One *kusum* tree near Balrampur in Manbhum is said recently to have produced Rs. 1,500 worth of lac in a year.

15. The number of lac-growers is of course far less according to Table XVII than according to the special census, for as already explained the cultivation of lac is usually a subsidiary occupation of agriculturists. The number of persons whose principal occupation was recorded as the cultivation of lac was in fact only 471. According to Table XVIII, which

relates to subsidiary occupations, the number of rent-payers who engage in lac growing as a subsidiary occupation is 11,228, and that of agricultural labourers is 556. Here again the number is far less than the figures of the special lac census, the reason being that as lac is cultivated only at certain seasons of the year and often on a very small scale, lac cultivation was in very many cases not thought worthy of being recorded even as a subsidiary means of livelihood in the general census schedules. According to the industrial statistics (Table XXII) the number of persons engaged in lac factories was 4,363 while according to group 64 (i) the total number of actual workers engaged in the manufacture of lac was 5,247. The difference is explained chiefly by the fact that a number of persons engaged in the manufacture of bangles and other petty articles of lac were classified under this head in Table XVII: there are for instance no lac factories in Tirhut though a large number of workers in lac were returned from that division. The statistics in Table XXII are therefore the more reliable of the two.

16. Under this head the decrease is accounted for by the increased numbers under group 133 which includes sellers of milk, butter, *ghi*, etc. It is difficult to say under which of these heads the occupation of the Ahir should more properly be classified.

17. The number of fishermen in the Chota Nagpur division has increased by 100 per cent. to 9,842: in Muzaffarpur and Darbhanga, where the figures involved are very much larger, there has been a 100 per cent. decrease: the number of persons supported by fishing in Tirhut is now 17,643. Elsewhere there is not much difference in the figures. It should be noted that the numbers of boatmen (group 110) and fish dealers (group 131) have also decreased. The persons supported by hunting were not numerous ten years ago: they have now fallen 57 per cent. to 4,163 only.

18. The exploitation of minerals supports a population of 204,043 persons. Under this head the most important industry is coal-mining. Information relating to the Jherria coal-field in Manbhum is available from two sources, from the general census of the population and also from the industrial schedules returned by the collieries. All the more important collieries were comprised for the purposes of the general census in a single coal-field charge; and from the enumeration books of this charge a special table was prepared, which is reproduced as Subsidiary Table XIII to this chapter, combining caste with age, birth-place and occupation for all the more important castes found. The coal-field charge did not however include certain small outlying collieries on the fringe of the field, or the persons, some of them engaged in or dependent on coal-mining, who were enumerated within the limits of the coal-field but outside the collieries, for instance in the Jherria bazaar. The total number of persons engaged in and dependent on coal-mining in Manbhum according to the general census was therefore greater than that included in the coal-field charge and amounted to 117,019 of whom 87,766 were workers and 29,253 dependents. According to the industrial schedules, which were returned by all collieries in Manbhum, including the petty mines outside the coal-field charge, the total number of persons directly employed under them was 82,619. The general census of the population relates to the night of March 18th while the special industrial schedules returned by the collieries relate to April 1st, but the difference of numbers introduced by the difference of date is not important. The general facts are that in Manbhum district at census time in 1921, between 80,000 and 85,000 people were directly engaged in the coal-mines; another 5,000 persons roughly were engaged in such operations as brought there within the scope of group 18 and nearly 30,000 persons were dependent on persons engaged in the industry, making a grand total dependent on the industry in this district of between 100,000 and 120,000 persons. The only other district where this group is important is Hazaribagh where the number of persons supported is 31,828. A fuller discussion of this industry is contained in the second part of this chapter.

19. Mica-mining supports 15,402 persons, of whom over 13,000 were enumerated in Hazaribagh. This industry also will be discussed at greater length in the second part of this chapter.

MICA-MINING.

(GROUP 22).

20. Tradition says that in the days when the Nuniya marketed his own products he was a rich man, but that must have been many years ago, for nowadays he works on a very small scale. Bihar, which has always been famous for its saltpetre, presents an ideal combination of circumstances for

SALTPETRE.

(GROUP 24).

its manufacture; there are supplies of nitrogenous organic matter owing to the concentration of a crowded population and numerous domesticated animals in the village sites; there is potash in the soil and the climatic and meteorological conditions are specially favourable. Saltpetre was one of the chief articles of trade in the Company's factory at Patna. The greatest days of the industry were during the American civil war when saltpetre was an essential ingredient of all explosives and when India almost held a monopoly of its production. Since then there has been a steady decrease in the output and value of Bihar saltpetre, owing to the increasing production of nitrates in other parts of the world and the changing fashions in articles used for manure and for the manufacture of explosives. The demand revived however to some extent during the war, when Government took steps to control and increase the output. From 1915 the whole of the exports were diverted to the United Kingdom and the exports from Bihar rose from 4,896 tons worth £76,946 in 1914 to 6,299 tons worth £154,207 in 1918. Since then the production has again come down to pre-war level and prices have fallen away. The Nuniya's stock in trade is of the simplest and most inexpensive variety and his methods are described as "a triumph of pure empiricism". On payment of four annas he obtains a license for a crude saltpetre factory which includes one boiler (*chulha*) and two filter-beds (*kuthias*): his raw material he obtains by scraping near the village sites, his inherited skill enabling him to detect the likely soil by sight, touch and taste. For this privilege he pays the landlord a rent of some Rs. 3 to Rs. 5 a year; or else he agrees to supply for the landlord's cattle the crude salt which becomes separated in the processes of manufacturing saltpetre. His processes have recently been subjected to a searching examination and need not be described here.* Ordinarily two persons are quite capable of working a factory; the work moreover is not hard and the women can assist. Some of the family therefore can go off and add to the family income by labour, Nuniyas being generally in great demand for earth-work of all kinds: it is in fact the exception for a whole family of Nuniyas to be engaged in their traditional occupation. The Nuniya could refine his saltpetre to a further stage than he actually does, being probably deterred from doing so by a traditional fear of the Salt Department out of respect for which he likes to give a dirty look to his crude saltpetre (*shora*). He could not however produce the standardized article which the market requires and the next stage is therefore carried on in refineries which are controlled by business men in touch with the vagaries of the market who can more or less dictate terms to the Nuniya. In former days the refiner would purchase a generous maund of crude saltpetre from the Nuniya for Rs. 2 or Rs. 3 and sell a strict maund of refined saltpetre for anything from Rs. 7 to Rs. 9. It is gratifying to know that when the price of refined saltpetre rose as high as Rs. 16 a maund during the war, the whole of the profit was not taken by the refiner or the middleman who in some cases intervenes between the refiner and the Nuniya: in those days the Nuniya received Rs. 4 to Rs. 6 a maund or double the price he was getting before the war. He now gets from Rs. 3 to Rs. 4 a maund, but then the price of the refined article also has fallen to Rs. 8. In response to the demand that arose during the war, more and more Nuniyas returned to their traditional occupation. In Saran and Champaran, which are the chief producing districts, the number of factories licensed for the manufacture of crude saltpetre rose from 13,502 in 1913-14 to 16,857 in 1917-18. In these districts alone therefore the war indirectly affected through this channel the

* See the pamphlet on the subject by Mr. Hutchinson of Pusa.

occupation of some thousands of persons. The census shows a slight decrease in group 24 as compared with 1911, but 26,498 persons still support themselves by this means. 7,814 male and 7,310 female workers were returned, the women playing an important part in the industry. Out of the 26,498 over 22,000 were enumerated in Tirhut and nearly all the rest in the Patna division and Monghyr.

21. The next sub-class to be considered is Industry which supports just over 2½ million persons, and the first industry to be considered is textiles.*

INDUSTRY.
COTTON WEAVING, ETC.
(GROUPS 25-27).
22. The number of workers and dependants supported by the cotton-weaving industry, *i.e.*, in the ginning, cleaning and pressing, spinning, sizing or weaving of cotton is 429,709 or nearly 10,000 more than in 1911, the increase occurring under spinning and weaving where it amounts to some 25,000. The number of persons employed in textile factories in this province being negligible, all these may be regarded as persons whose primary occupation is the manufacture of cotton cloth in their homes. The largest numbers of cotton-spinners were returned from Darbhanga, Gaya, Puri and Angul, the largest numbers of sizers and weavers from Cuttack, Gaya and Sambalpur. But weaving is commonly combined with some other occupation, usually agriculture: ten years ago weaving was recorded as a subsidiary occupation of 61,019 rent-payers and 3,891 agricultural labourers: on this occasion the numbers are 66,813 for rent-payers and 3,846 for agricultural labourers. The increase in numbers is probably due chiefly to the propaganda of Mr. Gandhi, but there is evidence to show that hand-weaving in this province has a sound economic as well as a sentimental basis. Amongst those who follow cotton-spinning or weaving as their principal occupation the proportion of Muhammadans (33 per mille) is higher than that of Hindus (8 per mille). A very large number of different castes were found to be engaged in the ginning, spinning and weaving of cotton, of which only the most numerous appear in Table XXIB. 55,825 of the Tantis, the Hindu weaving caste, which is 9 per cent. of the number shown in Table XIII, are engaged in these occupations; amongst the Jolahas, the Muhammadan weaver caste, 54,964 or not quite 7 per cent. of the caste are so employed. The Tantis are most numerous in Orissa and least numerous in Tirhut: the Jolahas are most numerous in the Patna division, but are found in large numbers throughout Bihar and Chota Nagpur. The number of Pans engaged in cotton-weaving and its kindred occupations is 22,348 but in Chota Nagpur many Pans must have returned themselves as Tantis. 19,767 Gandas and 17,896 Bahelias in Orissa and the states are similarly engaged. The 11,262 Doms whose profession is weaving are also found mostly in the states. Other castes which engage in weaving in large numbers are the Gonds (6,708), the Chiks (5,861), the Dhuniyas (4,989) and the Sheikhs (4,473).

23. The vitality of the cotton hand-weaving industry in Bihar and Orissa can be measured with some degree of accuracy by examining the statistics of the net imports of yarn. Cotton is not grown on any important scale in the province, the area under cotton being about 0.3 per cent. of the total area under cotton in India. Nor is raw cotton imported in any significant quantity. Again there are no power mills in the province and the exports of cloth of local manufacture are not important. It may safely be assumed therefore that all net imports of yarn, *i.e.*, all imports after allowing for re-exports, are woven into cloth on hand-loom for local use. In 1912-13, the first year of the new province, the net imports of twist and yarn amounted to 25,256,000 lbs. of which 10,496,000 lbs. went to Bihar, 8,282,000 lbs. to the Orissa division and 6,478,000 lbs. to the Chota Nagpur division. In 1914-15 the quantity slightly increased, the proportions going to the different parts of the province remaining the same. Since then the quantity has decreased; but the decrease in imported cloth has been much greater, the high cost of cloth of all kinds compelling people to wear old clothes which in other

* Much of the information in the following paragraphs was supplied by Mr. J. CLARK, late textile expert with the local Government, and his successor, Mr. RAY.

days would have been discarded : so that whereas in 1912-13 one-seventh of the cotton cloth worn in the province was of local manufacture, the proportion had risen to over one-sixth by the end of the decade. It is clear therefore that the hand-weaving industry is holding its own.

24. In order to obtain more accurate statistics in connexion with handloom weaving, a census of handlooms was taken in connexion with the census of the population and the results are exhibited in Subsidiary Table XI, at the end of this chapter. 164,592 handlooms were found to be working in the province, of which 21,283 were in North Bihar, 18,033 in South Bihar, 21,466 in Orissa and 103,810 in the Chota Nagpur Plateau. These looms weave each year on the average 20,000,000 lbs. of yarn mostly of coarse counts into cloth worth nearly 5 crores of rupees. By far the greater number of the looms weave cotton, but silk and wool are also woven. The districts which contain the greatest number of looms are the Santal Parganas (18,835), Cuttack (12,695), Sambalpur (11,602) and Ranchi (11,011). Centres in which weaving is of special importance are Bihar in Patna district which produces the greatest variety of cotton goods in the province, Bhagalpur town and its neighbourhood which are famous for *bafta* cloth (a mixture of tasar and cotton), the Madhubani subdivision of Darbhanga district which produces the well-known *kokti* cloth, the yarn for which is spun by hand from a local variety of brown tree cotton, Cuttack, where there are strong communities of domiciled Bengali and Telugu weavers, and Sambalpur where the Bhulias weave *saris* with solid cross-borders which cannot be woven on a power loom. Seventy-five per cent of the cloth woven is quite plain. When dyed yarn is required it is usually purchased in the market or else the weaver purchases chemical dyes and dyes the yarn himself : the use of vegetable dyes is now the exception and is practically confined to indigo.

25. Except in the case of the Bhulias in Sambalpur, the Bengali community in Cuttack and the tasar weavers of Bhagalpur, the weaver commonly combines some other occupation, usually agriculture, with his weaving, and this is the easier to arrange because the weaving unit is not the weaver but the weaver's family. When the yarn is purchased the women and children do all the winding and warping and often assist in the sizing of the warps; and this is no mean contribution for the warping of sufficient ends for one warp alone involves a walk of eight or ten miles. There is no regular system and no fixed hours of work : the small lamp on the loom shows that the weaver often works early and late, but he seldom works in the heat of the day. In good seasons the weavers of Bihar and Chota Nagpur and the weavers of bordered *saris* in Sambalpur used to earn from 8 annas to Re. 1 a day : the weavers of ordinary cloth in Sambalpur and Cuttack used to earn about half that sum. During the off seasons earnings were roughly half what they were in the good seasons. Nowadays however the weaver's earnings have increased with the great increase in the cost of cloth of all kinds and in spite of the increased cost of yarn : it is estimated that a family which uses the ordinary type of loom now earns Re. 1 a day on the average or from 10 to 12 annas in Orissa.

26. Most of the looms in use in the province are pitlooms of antique design and the processes of weaving are of the most primitive kind. Efforts have been made to induce the weavers to adopt the fly-shuttle loom, which is estimated to increase the output from the same amount of effort by at least 50 per cent., but except in the Madhubani subdivision of Darbhanga these efforts have not been successful. It seems however inevitable that in course of time the force of circumstances will lead to their adoption. It also seems likely that hand machines for winding, warping and sizing will be brought within reach of the cottage worker : how necessary such appliances are if hand weaving is to be economically conducted will be apparent from the fact already mentioned that at present the weaver's assistant has to walk anything from eight to ten miles to warp sufficient ends for one warp.

27. The vast majority of the weavers in the province are their own masters, but in a few cases, where the materials are costly, as with the silk weavers at Bhagalpur, or the weavers are so poor that they can get no credit,

as is not infrequent in Cuttack, they weave for others on a fixed wage. The capital of the weaver who is his own master being small he can produce only in small quantities and his ability to purchase a fresh supply of yarn, of which he buys a few hanks at a time, depends on his disposing of each batch of cloth as it is ready. When there is a brisk demand for cloth in the harvest and marriage seasons he attends the markets in person and disposes of his stock in order to save the middleman's profits: the ordinary varieties of cloth therefore which are disposed of in this manner by the weavers themselves do not travel far from the place where they are manufactured, but in the case of articles for which there is a special demand, such as the *bafta* and *tasar* cloth of Bhagalpur, the *kokti* cloth of Darbhanga or the bordered *saris* of Sambalpur, the market is more extensive and the marketting is effected through petty dealers. In the slack seasons also, when the weaver finds no demand for his cloth in the market, he is compelled by his lack of capital to sell it to the *mahajans* for whatever price he can obtain and the *mahajans* hold it up till a demand occurs. In such cases the cloth usually passes through the hand of two extra persons, each of whom takes 2 annas in the rupee thereby increasing the price of the article to the consumer. The rise in the price of yarn from Rs. 3 to as much as Rs. 14 a bundle has also had the effect of driving the weaver more than before into the hands of the *mahajan*. In order to meet the difficulties which the weaver encounters through lack of capital and of facilities for marketting his cloth co-operative societies have been started and affiliated to central stores where the cloth can be put on the market to the best advantage. There are now 58 such societies with 1,055 members, and two central stores (one at Ranchi and one at Bhagalpur) while two more central stores (at Bihar and Madhubani) are being formed.

28. A more serious handicap remains in the fact that the hand weavers are at the mercy of their rivals, the mills, from whom they obtain their yarn. It has already been stated that cotton is not a commercial crop in this province; nor is it likely to become so for the soil is not favourable: moreover, if the land was devoted to growing cotton it would have to be taken from growing other crops and it is doubtful whether this would be in the best interests of the people. The cotton, therefore, that is used in this province must be imported. It may be imported raw and spun into yarn locally or it may be imported in the form of yarn. If imported raw it would in present circumstances have to be spun by hand and it has been conclusively proved by practical experiment that the spinning of yarn by hand does not pay: an expert spinner will earn something less than one anna a day which is less than the wages earned by any form of unskilled labour. Moreover hand-spun yarn takes about four times as long to weave into cloth as mill-spun yarn. As the result of the recent movement in favour of home-spun yarn a number of weavers have been using it for the weft, but they still use the stronger and more uniform yarn from the mills for the warp: in the case of *kokti* cloth both warp and weft are hand-spun, but a special sanctity attaches to the use of this cloth and it therefore commands a special price, so that the weavers can afford to spend as much as ten days in weaving sixteen yards of it. An ordinary weaver will weave six yards of cloth or more in a day, consuming yarn at the rate of 1 lb. for every $4\frac{1}{2}$ yards. Suppose he uses $1\frac{1}{2}$ lbs. of yarn a day; this will cost him, if he uses 20s, about Rs. 2-4, the cost of the same weight of raw cotton being 9 annas. For the cloth which he weaves in a day ($6\frac{3}{4}$ yards) he will receive say Rs. 3-6. If therefore he uses mill yarn he will earn Rs. 3-6 minus Rs. 2-4, the cost of the raw material, or Re. 1-2 in one day, while if he uses hand-spun yarn he will earn Rs. 3-6 minus 9 annas or Rs. 2-13 in four days, that is to say at the rate of rather over 11 annas in one day. It is clear therefore that, even on the assumption that the cost of spinning the thread is *nil*, it will not pay the weaver to use hand-spun yarn. It is difficult to see how the *charkha* can be made an economic proposition in this province or how the hand weavers can avoid getting their supplies of yarn from the mills. The fact is, as pointed out by Marshall,* that "textile materials are delivered by nature in standardized primary forms well suited for massive change into standardized finished products..... Cotton and

* Industry and Trade, page 56.

wool.....both lend themselves to be laid out in orderly array by machinery, and thus to be spun into yarn". The yarn supplied by the mills is stronger, more uniform and easier to weave than the hand-spun variety: the mills moreover can blend the raw cotton so as to produce the best results in a way in which the individual cannot. Every advantage therefore lies with the mill-spun yarn. The difficulty of the resulting situation from the hand-weaver's point of view is two fold. When he purchases his hanks of mill-spun yarn he has to pay also for the cost of reeling, bundling and baling, for the mill-owner's profit, the salesman's commission, the freight and the middleman's profit, to say nothing of the fact that he has himself to fetch it from the market and rewind it for his weft before use—all of which charges the rival mill-owner escapes: but, worst than this, the mill which supplies the yarn is also a rival weaver of cloth and well aware of the fact. It is indeed surprising that the handloom weaver, existing as he does at the tender mercies of the mills which can produce 95 per cent. of the different kinds of articles which he produces just as well if not better, manages to maintain his place in the sun. The secret of his success appears to lie in the fact that he has at his disposal the labour of his women and children who otherwise would not be engaged in production of any kind; consequently he is able to get all his preliminary processes done free of charge. His relation with the mills must always be a source of weakness to him, but he has managed to struggle against it so far and there seems to be no room why his position should not be strengthened as his other handicaps are minimized by the introduction of improved appliances and methods of marketing.

29. So much attention has lately been given to the subject of hand-spinning and weaving, that a few more words may perhaps be added with regard to the possibility of encouraging these occupations in the people's homes not as a whole-time profession but as a secondary occupation. For the reasons already given it does not appear likely that hand-spinning will ever be an economic success in Bihar and Orissa. Lamentations over the decline of the spinning-wheel are not confined to India. Similar complaints were heard in England a hundred years ago. "Venerable Art", wrote Wordsworth of spinning in one of his sonnets,

" Torn from the poor! yet shall kind heaven protect
Its own, though Rulers, with undue respect,
Trusting to crowded factory and mart
And proud discoveries of the intellect,
Heed not the pillage of man's ancient heart".

The words might have been written in India to-day by some devotee of the *charkha*. But in England the spinning-wheel is dead, and it is difficult to suppose that sentiment alone will keep it alive in India.

30. The case of hand-weaving is different. There are periods in the cultivator's year when all the members of his family are busy in the fields, but there are also periods when this is not the case, and when the family are idle. At such times there is much labour running to waste and ample scope for some form of secondary occupation. The cultivator who could bring himself and his family to learn the art and face the initial outlay of a loom and its connected appliances (say Rs. 25) would save himself the difference in cost between the cloth which he buys and the yarn of which it is woven, or at present prices say Re. 1-2 over each *chaddar* and each *sari* used in his family. The initial outlay on the loom could be recouped in a couple of years and thereafter the money saved would be sheer profit. Hand weaving conducted on these lines would be as sound economically as it would be acceptable to the sentiments of the people.

31. The weaving of woollen blankets supports 14,272 workers and dependants of whom over 9,000 are found in Gaya or Shahabad. The weaving of woollen carpets supports another 1,320, mostly in Patna district. The number of looms employed in weaving wool according to the special census is 2,470 of which 1,261 are in the Patna division, while Muzaffarpur,

WOOL-WEAVING.

(GROUPS 31-33).

Palamau, Bhagalpur and Ranchi contain over 100 apiece. 7,356 of the 8,835 workers in groups 31, 32 and 33 are Gareris. The market for the blankets is mostly local but the woollen goods woven in the Aurangabad subdivision of Gaya find their way as far as Calcutta. The blankets are not however of a high class: the methods of weaving are laborious and inefficient and the texture of the blankets, which consist of narrow strips stitched together, is poor. The wool that is purchased in the local market has to be well carded with a bow and spun by hand on *charkhas*: it is then stretched in the open air and sized with a paste of ground tamarind seeds. Hand-spun yarn is only available in limited quantities; it can only be used in short warps and the putting of short warps on the loom takes a great deal of time and labour. The use of mill spun yarn for the warps is therefore the first necessity if this industry is to be developed. The appliances used in weaving are of the simplest, the shuttle consisting merely of a hollow bamboo pipe. When the strips of blanket have been woven, they are stitched together and milled by being trampled under foot in hot water, which causes them to shrink and consolidate. After this they are washed, dried, pressed and folded and are then ready for the market. In some districts the blanket industry is a subsidiary occupation of agriculturists. The weaver usually makes Rs. 2 or Rs. 3 on a blanket which he sells for Rs. 4.

32. There is a considerable trade in tasar silk of which no trace is found in the occupation tables, because the breeding of the tasar insect in semi-captivity and the collection of the cocoons is not pursued as a principal occupation and, like the breeding of lac, it is often conducted on such a

SILK-WEAVING.

(GROUPS 34—35).

small scale as not to be regarded even as a regular subsidiary occupation. The caterpillars are attached in a small basket to a tree from which the cocoons are collected in due course, and such of them as are not required for breeding purposes are dried in the sun and sold. These cocoons fetch about Rs. 12 for a *kahan* of 5 seers or Rs. 100 a maund. Two broods are reared in a year. One of the most important markets is at Chaibasa whence the cocoons are exported by Marwari middlemen but the cultivation of tasar is fairly common throughout the Chota Nagpur Plateau. The output of cocoons in Bihar and Orissa is sufficient to supply not only the provincial demands but also those of the tasar weavers of Bengal and the Central Provinces. The exports for the last five years of the decade are given in the margin.

EXPORT OF TASAR COCOONS.

Year.	Maunds.
1916-17	5,010
1917-18	2,818
1918-19	1,282
1919-20	3,857
1920-21	4,972

33. The 2,460 silk spinners in group 34, of whom 1,614 are women, are employed at the next stage of the process. The dried cocoons are boiled in water mixed with ashes to soften them, the outer floss is removed and the silk from 6 to 8 cocoons is then reeled together into a single thread which is consolidated by being rolled along the spinner's thigh. This work is done almost entirely by women. The silk is not dyed; its natural colour is retained but, if its use is to be popularized, it is probable that some system of bleaching will have to be introduced. A five-seer *kahan* of cocoons yields a seer of thread, the spinning of which takes from ten to fifteen days. The remaining processes are exactly the same as in the case of cotton weaving. The process of reeling the tasar silk is so slow that the weaving keeps well ahead of it and the loom either remains idle in the intervals of waiting or is used for weaving cotton cloth. Consequently the distinction between the looms employed in weaving cotton and silk is not definite and it is probable that a considerable number of the looms shown as used for weaving cotton in Subsidiary Table XI are used at intervals for weaving silk and *vice versa*. 6,315 persons are shown as supported by silk weaving (group 35), more than half of whom come from Bhagalpur which as already stated is the principal centre for weaving *bafta* cloth. A silk institute is being opened there by Government to assist the tasar industry and at the same time to introduce the mulberry silk industry.

34. Under the head of Industry there has been on the whole a decline of 10 per cent. The industry of hides and skins shows a marked increase but

OTHER INDUSTRIES.

(GROUPS 39—103).

this is correlated with an even larger decrease under the group 124 which includes traders in these articles: this transfer is in accordance with the principle that where a man is both maker and seller he shall be regarded as a maker. This trade is chiefly in the hands of Muhammadan dealers who take leases from landlords of the right to collect the hides of animals that die in their villages from the local Chamars: these are collected in godowns by the railway and exported up-country to Cawnpore or down-country to Calcutta. Brass workers (group 49) and toddy drawers (group 74) both show substantial increases in numbers, the latter due no doubt to the decrease under group 129, vendors of wine, etc.; otherwise the decline in numbers in this class of industries is fairly well spread. One small but interesting increase is in group 93, gas-works and electric-light and power; and the increase would have been greater but for the fact that the classification was on industrial rather than on occupational lines, so that for instance the electricians of the Tata Iron and Steel works are included under group 46, forging and rolling of iron and other metals.

35. Under the head of Transport, there have been decreases under transport by water and road and slight increases in transport by rail and in

TRANSPORT.

(GROUPS 104—120).

post office, telegraph and telephone services. The decrease is most marked under group 115, *palki*, etc., bearers and owners, in which it has occurred throughout the province. Persons, other than private servants, connected with mechanically drawn vehicles are for the first time shown separately but they amount to 114 only.

36. That only 5 per cent. of the population has been recorded as engaged in commerce is due to the fact that most of the trafficking that takes place in

TRADE.

(GROUPS 121—154).

the province assumes a form which eludes the census enumerator. The distribution in the case of the greatest industry of all, agriculture, passes almost unnoticed in the tables: only 225,181 persons are shown in group 136, grain and pulse dealers, though it is clear that a much larger number of persons must assist in the distribution of agricultural products. The truth is of course that most of the trade of the province takes place at rural markets, and the following table gives the number of principal and minor markets in each district of the province:—

DISTRICT.	No. of principal markets.	No. of minor markets.	DISTRICT.	No. of principal markets.	No. of minor markets.
NORTH BIHAR.			CHOTA NAGPUR PLATEAU.		
Saran	40	196	Hazaribagh	24	94
Champaran	18	157	Ranchi	2	172
Muzaffarpur	57	308	Palamau	5	109
Darbhanga	28	137	Manbhum	25	67
Bhagalpur	45	119	Singbhum	3	91
Purnea	12	303	Santal Parganas	34	203
SOUTH BIHAR.			Sambalpur	4	69
Patna	41	11	Angul	1	10
Gaya	38	96	GRAND TOTAL	432	2,464
Shahabad	6	113			
Monghyr	20	62			
ORISSA.					
Cuttack	3	53			
Balasore	14	57			
Puri	12	37			

This gives one market to every 29 square miles and to every 11,700 of the population in British districts.

The articles ordinarily supplied to the villagers through the rural market or *hât* are vegetables, spices, *ghi*, *dahi*, betel-nut, fruit, fish, meat, soap, medicines, tobacco, cotton cloth, blankets, shoes, implements and utensils, lanterns, matches, baskets, earthen pots, buttons, thread, needles, pencils, paper, lac and glass bangles and other ornaments. The most costly articles, such as piece-goods, kerosene oil and lanterns are imported from abroad or from distant parts of India. On the other hand the extent to which the markets are used as the first collecting point for food-grains which are ultimately exported will be described below: it is at these markets also that other rural products such as lac, tasar, and, in districts like Patna and Saran, vegetables are first bought up by dealers' agents with a view to export to distant places. While however the remotest markets have connexions in this way with the great world of commerce, the bulk of the articles which change hands there are produced and consumed locally. The ordinary market is held once or twice a week and the arrangements for it are made and the profits derived from it are taken either by the landlord of the land on which the market is held or some intermediary who leases it from him. These profits are taken in much the same way all over the province. Rent is usually charged for the stalls if there are any, while sellers who do not patronize the stalls are charged a toll (*chungi*) of so much for each cart-load or basketful of goods and for each head of cattle sold. The rents of stalls of course vary greatly, but in the strictly rural markets Rs. 3 a month would appear to be about the maximum: in others it sinks as low as one pice for each market day. The tolls also vary. In many places 4 to 6 annas is charged for a cart-load of rice and as much as 10 annas for a cart-load of molasses; elsewhere the charge is 1 to 2 annas according to the contents of the cart. The ordinary rate on basketful varies from 2 pice down to a half of pice for a basketful of vegetables. In some markets every seller pays a fixed rate for each market day irrespective of his actual sales, the scale being graded according to the nature of the article which he ordinarily sells. Elsewhere again the toll is calculated on the value of the articles sold, for instance one pice in the rupee on the total value of goods sold on that day. The rate charged for the sale of goats is usually about 3 annas each and that for larger cattle proportionately more.

37. Practically all the transactions are effected in cash though in some places labourers who receive their wages in kind exchange what they have earned for oil, salt, spices or their other modest requirements. The use of *cowries* seems to have been almost entirely discontinued and Gorakhpuri pice are only used in a few places in the west of the province. Elsewhere the coins in most common use are the copper pice and half pice which are preferred to nickel and even to silver. As to the volume of trade put through at these markets it is impossible to give any estimate, but certainly even in remote parts of the Chota Nagpur Plateau where lac is grown and sold nowadays at Rs. 70 a maund, considerable sums of money must change hands. Prices are regulated by competition more than might be supposed. Most people have access on foot to at least two markets and they usually compare the current prices: bullock carts go much further afield and it is recorded for instance that molasses produced near Kodarma are taken by road to Hazaribagh and even to Ranchi, 100 miles away, if a better price can be obtained there. The larger stall-holders are probably professional traders, many of them Marwaris, who operate at several markets. This is the only kind of salesman who keeps any accounts. The petty sellers ordinarily sell at one market only.

38. The extent to which the ordinary food-grains change hands at the markets differs in different parts of the province. In South Bihar when the grain is threshed and lying ready on the threshing floors, the local dealers or *beparis*, who very often belong to the Teli caste, visit the threshing floors with their pack-bullocks or, where roads are passable for carts, with their carts. Sometimes they come alone, but more usually they come in twos and threes. This affords scope for the congenial occupation of bargaining; each party trying to make the best bargain for himself at the expense of the other cultivators and *beparis* that he can. It is customary for the *bepari* to pay,

cash down before removing his purchases, but, if he is a man with a well-established local reputation payment is sometimes deferred. These sales take place as soon as the grain has been threshed and is ready to be moved. In North Bihar on the other hand reports show that most of the crops change hands not on the threshing floors but at the markets; and in Orissa, where there is a superstitious dread of selling crops from the threshing floor, they are sold either at the markets or at the *golas* described below. The chief function of the *bepari* in Orissa in regard to the crops is their retail sale. In Sambalpur the first hands through which the crops pass after leaving the cultivator are those of a class of women called *kochnis* whose profession it is to collect and clean the grain before bringing it to the smaller dealers. The *bepari* is usually the owner of a small shop in which he stores a part of the grain he has purchased for local retail sale: for instance, in the case of paddy he will buy in February or March and sell locally about the break of the monsoon in June when the price is beginning to rise. But the financial resources of the *bepari* are limited and the greater part of his purchases will probably be passed on to a *goladar* or *arhatia*. The relations of these two classes of middlemen differ; in some cases the *goladar* acts as the agent of the *bepari* and stores and disposes of his grain for a commission; in some cases the *bepari* sells outright to the *goladar*; in other cases the *bepari* takes advances from the *goladar* and acts as his agent. The export trade of the district is generally centred in the hands of a small ring of big *goladars*, usually Marwaris, or in Orissa Muhammadan Kachchhis, who pass it up-country to the United Provinces or beyond, or in the other direction to Bengal and Calcutta or Madras.

39. In general terms therefore it may be said that the cultivator takes no part in and gets none of the profits that are made out of the marketing of the produce of his fields. The risks of the local trade are shouldered by the *beparis* and *goladars* and the profits of it are shared by them; when the grain travels further afield the trade passes into the hands of a set of more substantial middlemen whose resources and whose outlook are larger and whose market is the whole of India. These generalizations of course need qualification to make them fit the facts. Two opposite tendencies can be traced which tend to upset the arrangement described. The professional middlemen are not the only persons who realize that there is a good thing to be made out of holding up the grain for a favourable market, and not infrequently the landlords and the more substantial cultivators, who can afford to do so and who have the necessary storage room, do their own local marketing: especially in Orissa it is said that the persons who control the local market are not a class apart, but the landlords and the richer cultivators themselves. In this manner the cultivator is extending his operations into the province of the middleman. On the other hand the export of grain on a big scale is not entirely in the hands of the Marwaris for the largest of all the exporting firms is Messrs. Ralli Brothers who operate on a system which is not that described above. This firm employs in the province a hierarchy of agents and sub-agents who are to be found at all the most important centres; the employés of the firm get into touch with influential local men and are said to make advances through them to the cultivators who agree on their part to supply a certain quantity of grain at a fixed price at harvest time: they also purchase outright on a very large scale. The resources of this firm and their knowledge of the course of trade all over the world enable them to do this to the best advantage. It is interesting to note that Indian middlemen also are in some places extending the scope of their activities in a similar manner by financing and thereby taking upon themselves some of the risks of the cultivators and a Japanese firm is also stated to have opened operations on the same lines.

40. When grain is imported, the channel through which it passes is the same; it is brought to the public through the big scale trader, the *goladar* and the petty trader.

41. There is little to remark about the statistics under the head of Trade. Most of the groups show increases but there are big increases to 172,493 under group 133, sellers of milk, etc., owing to a decrease in the number of recorded

cattle-breeders and to 229,545 under the group 152, general store-keepers and shop-keepers otherwise unspecified.

42. The army is scantily represented in this province with only 1,515 persons of whom over 1,000 were found in Patna where is the only cantonment.

PUBLIC ADMINISTRATION.

(Groups 155—164).

The navy also was at first recorded as the profession of a number of female workers in Patna, but further investigation proved that, great as are the educational facilities of the provincial capital, the female A. B. has not yet been produced there. The air force is not represented at all. The police force is shown as the profession of 13,111 male workers with 13,716 dependants: the actual strength of the force according to departmental returns was just under 15,000, but a glance at Table XVII. Part B. will show where the discrepancy has arisen, namely in the Patna division where constables were classified as Government servants and it was subsequently found impossible to disentangle them and restore them to their proper group. Among village *chaukidars* also (group 160) there must have been a leakage throughout the province, probably to the ranks of the agriculturists or of Government servants. 67,210 persons are supported by service of the State (group 161), of whom 23,845 are male and 1,262 female workers and 42,100 are dependants. Service of Indian or foreign states (group 162) supports 14,354, practically all of whom come from the Feudatory States of Orissa. Service of the various local bodies (group 163) gives support to 8,096 persons and there are 4,464 persons in group 164 which includes village officials and servants other than watchmen: they are most numerous in Sambalpur, where the *gaontias* were so classified, and in the Orissa States.

43. Of the five professions shown separately religion supports 168,945 persons, the law 21,500, medicine 42,408, instruction (*i.e.* education), 50,306

PROFESSIONS AND LIBERAL ARTS.

(Groups 165—179).

and literature and the fine arts 46,199, most of them musicians and drummers. Under the head religion, priests and ministers in group 167 are most numerous in South Bihar and Cuttack, while temple servants and pilgrim conductors in group 168 are most numerous in Puri, Cuttack and the Orissa States, 6,423 male workers being shown in Puri under this group alone. The application of a lady who applied to practise as a lawyer having been refused, there are no female workers in the order which relates to law but there are 5,797 male workers each of whom supports on the average nearly 3 dependants: half of the lawyers are Kayasths. Under the head of medicine the female workers are nearly twice as numerous as the male, this being due to the inclusion of a large number of village midwives in group 172. Amongst the doctors the Brahmans are by far the most numerous caste. Of the 50,306 persons supported by instruction (groups 173 and 174) 22,426 are male and 1,334 are female teachers. Orissa has the greatest number of teachers and of the Orissa districts Cuttack is easily first with 3,954 male and 174 female workers. Brahmans are again the most numerous caste in this group, and after them the Kayasths, Karans, Jyotishs and Sheikhs: amongst female teachers Indian Christians are most numerous. The same prominence of Orissa and Cuttack is noticeable in the fine arts: authors and other artists (including astrologers) and musicians are all of them most numerous in these parts: the former of these two groups (No. 177) supports 5,040 persons in the province and the latter 37,123.

44. Domestic service accounts for 542,362 persons amongst whom male workers number 171,432 and female workers 122,133. They are most numerous in South Bihar and least numerous in Chota Nagpur, which is on the whole what might be expected. Coachmen on the other hand are more numerous in North Bihar.

DOMESTIC SERVICE.

(Groups 181—183).

45. In this order the number of persons who are or are supported by clerks, etc., in unspecified offices (group 185), is 76,152, while in the group for unspecified labourers (No. 186) 1,228,528 persons are included.

INSUFFICIENTLY DESCRIBED OCCUPATIONS.

(Groups 184—187).

46. There is a considerable local demand for the miscellaneous labour represented by this group which requires no special skill or experience beyond what a coolie may be expected to acquire in the ordinary course of his career in connexion, for instance, with the construction or repair of roads and buildings for Government or the local bodies or with railway works or the thousand and one minor activities of the local contractor. Labourers of this kind emigrate in thousands to Bengal but a considerable demand for them exists in the province. It is persons of this type who are included in group 187 and in order to obtain a more distinct idea of their circumstances a set of questions was drawn up and circulated throughout the province to which over 80 replies were received from contractors, both small and great. The demand and supply of labour for work of this kind is regulated by the seasons. On the one hand the contractors require labour from July to October or November for consolidating *pukka* roads and from November to February for repairing *kutchha* roads and other forms of earth-work while bridges are repaired and buildings erected most conveniently in the cold and the hot weather. On the other hand the labourers are not easily obtainable in the cultivating and harvesting seasons—complaints on this head are universal—when the demand for and price of agricultural labour rises. This fact shows that the distinction between undefined and agricultural labourers is not a hard and fast one, so that if the census was taken in say July a considerable transfer would probably take place from group 187 to group 5. In Bihar the castes in most demand for earth-work are Nuniyas and Beldars or in some places Bindis, though all the usual castes such as Goalas, Koiris, Chamars, Dosadhs, and even Brahmans and Rajputs are mentioned. For masonry work Muhammadans are preferred and amongst Hindus Gonrs and Telis. In Orissa, the castes usually employed are the Bauris, Chasas, Pans and Khandaits while a certain number of Santals from the states find employment in Balasore. In Chota Nagpur the castes are more various. The local aboriginal tribes do most of the earth-work. In Hazaribagh the Bhuiyas are preferred for earth-work and the Kandus who are akin to the Gonrs for masonry. In Ranchi the Oraons and Mundas do much of the unskilled work while that which requires rather greater skill is done by Muhammadans, Dosadhs and Lohars. In Palamau Nuniyas and Oraons are preferred for earth-work. In Manbhum, where the draw of the coal-field and the factories is felt, Santals, Bauris, Koras and Kurmis are most commonly employed. The Hos in Singhbhum are generally employed on daily labour and the Oraons on contract work—a preference which they show also at Jamshedpur. The Santals in the Santal Parganas are commonly employed on earth-work while Muhammadans and Nuniyas are engaged for breaking ballast. In Sambalpur it is the Gandas and Sahars who do the earth-work and the Kols, *i.e.*, the Oraons, Mundas and Kharias who are employed on the buildings. Generally speaking however the local aboriginal tribes do the earth-work, while the lower Hindu castes and the Muhammadans do the work in which a rather higher degree of skill is required. The labour is mostly local. In South Bihar some of it comes from North Bihar and in both North and South Bihar some of it comes from the adjacent districts of the United Provinces. In Orissa the labour is local; labourers drift from Cuttack to Puri and from Puri to Cuttack, but as a whole Orissa supplies its own demand for labour of this kind. In the Chota Nagpur Plateau also the labour employed is of local origin except that the Shahabad labourer finds his way into Palamau and the Cuttack labourer into Angul. Labourers can usually be obtained without the assistance of a recruiting agency but if any difficulty is experienced an emissary in the shape of a mate or *gomastha* is sent out armed with advances to look for men. Advances also are commonly given even when the labour comes of its own accord and vary from the equivalent of a week's to a month's wages: the larger contractors sometimes employ sub-contractors and in that case the advances are made to them. Where a contractor is in the habit of taking contracts every year in the same neighbourhood, the same labourers will often come and work for him from year to year, but there is nothing to bind employed to employer except local convenience.

47. The wages paid to general labour of this description have greatly increased in the last few years. In Bihar and also in Orissa the daily wage of a man varies from 4 to 8 annas, that of a woman from 3 to 6 annas and that of a child from 2 to 5 or 6 annas according to size. Some of the Bihar contractors state that at the busy agricultural seasons they have to give up to 10 annas a day to secure a labourer, that being the wages that a man can earn in field-work even if he has no fields of his own to attend to: in Patna where the building of the New Capital created a keen temporary demand for labour the rates given by some of the contractors are rather higher; most of them however state that 7 annas is the ordinary daily wage for a man and 5 annas for a woman. Masons of course draw more, up to Re. 1-4 or Re. 1-8 a day. In the Chota Nagpur Plateau the conditions are more various. In Hazaribagh a man gets from 4 to 6 annas and a woman or child from 2 to 3 annas. In Ranchi a man usually gets 5 annas and a woman 4 annas, while a child gets from 1½ to 3 annas according to size and sex. In Palamau labourers are said to be more difficult to obtain and their rates of pay higher, perhaps because the available labour supply is largely at the disposal of the local landlords. In Manbhum and Singhbhum the rates for men are rather higher owing to the rival demands for labour for industrial purposes. Wages are lowest in Angul where a man earns from 2½ to 4 annas, a woman 2 annas and a child from 1 to 2 annas. The wages are paid often weekly and sometimes daily when the labourers show signs of being "out of hope"; the practice of daily payment seems to be universal in Orissa. Advances are usually adjusted at monthly intervals. By this adjustment of advances and the distribution of *bakshish* on occasion some kind of standard of work can be exacted. Throughout the province the women and children are generally employed as carriers. If they are working at any distance from their homes or if they have no homes, they generally come with the male members of the family, but they often come independently when they are working close to their homes and can return there for the nights. The work is usually done in two spells with an interval at midday and it is interesting to note that one of the Ranchi contractors complains that whereas the labourers a few years ago used to work for eight hours he cannot nowadays get them to work for more than six: the same tendency to curtail the hours of work rather than earn more and improve the standard of living, as the economic man would do, has been very noticeable in the coal-field and shows that whatever may be the defects of the local labourer he has at all events the virtue of being content with his lot. The estimates of the number of labourers who cultivate their own fields vary very greatly and cannot be regarded as reliable, but it is clear that a fair proportion of them are agriculturists on a small scale.

48. The only other numerous group is group 189 which includes beggars, vagrants, witches, wizards, etc., to the number of 156,285. In this group the most numerous castes are the Brahmans, Baishnabs, Fakirs and Bhats.

BEGGARS, ETC.
(GROUP 189).

INDUSTRIES.

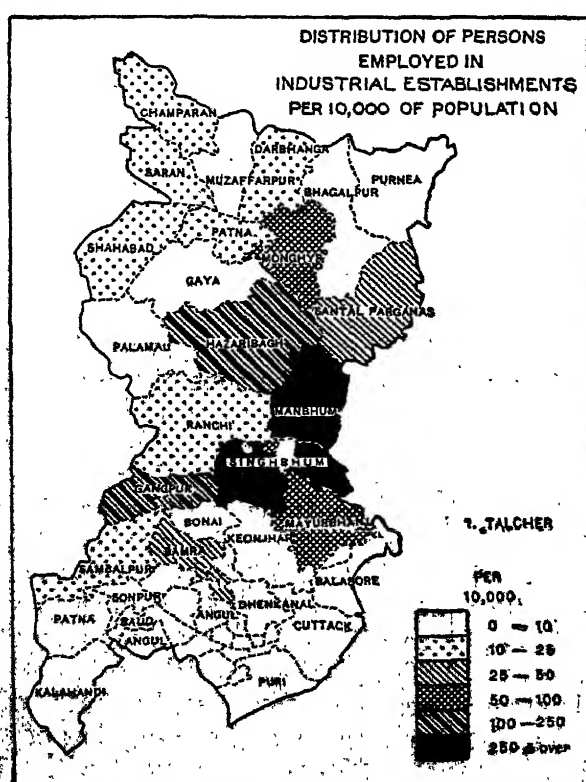
49. Of industrial establishments as defined in paragraph 4 there were 1,086 at work in the province at the time of the census employing a total of 219,974 persons or not quite 6 per mille of the population of the province. Subsidiary Table XIV shows that, whatever may have been the decrease under industrial occupations in the general census, this decrease must have been in the ordinary village industries, for in the organized industries which come within the scope of the special census there has been a marked increase. The number of establishments employing 20 persons and over has increased from 585 to 862 and the total number of persons employed in them from 179,714 to 216,689. Mines, which are practically confined to the Chota Nagpur Plateau, account for nearly half of the number of establishments (488) and more than half of the number of employés (127,178); under this head of mines, 380 coal mines with 103,315 employés,

DISTRIBUTION OF INDUSTRIAL
POPULATION.

and 92 mica mines with 12,840 employés are the important items. The next most numerous kind of establishment is that connected with chemical products (171), in which are included lac factories (111), salt petre refineries (33) and oil mills (20), but the average number of employés in these establishments is small being only 41. There are also 99 establishments with an average of 104 employés each engaged in the production of foodstuffs of which the most numerous and important are sugar factories. The largest single establishment in the province is the Tata Iron and Steel Works at Jamshedpur which directly employs 25,669 persons: next to this come the workshops of the East Indian Railway at Jamalpur with 11,527 employés. Including these two establishments the average number of employés in the industrial establishments of the province is 203, but if they are omitted it falls to 168 only.

50. The local distribution of the population employed in industrial establishments is shown in the following table and map; Chota Nagpur with its mineral resources is by far the most important area of the province from the industrial point of view :—

NATURAL DIVISION AND DISTRICT.	Population employed in industrial establish- ments.	Per 10,000 of total population.	NATURAL DIVISION AND DISTRICT.	Population employed in industrial establish- ments.	Per 10,000 of total population.
NORTH BIHAR	16,780	11·88	ORISSA	1,481	3·71
Saran	3,571	15·26	Cuttack	817	3·96
Champanan	2,072	10·67	Balasore	133	1·36
Muzaffarpur	2,650	9·62	Puri	531	5·58
Darbhanga	5,722	19·64	CHOTA NAGPUR	179,201	144·71
Bhagalpur	1,469	7·22	PLATEAU.		
Purnea	1,296	6·40	Hazaribagh	30,679	240·25
SOUTH BIHAR	22,404	29·58	Ranchi	2,825	21·17
Patna	3,144	19·97	Palamau	725	9·89
Gaya	1,848	8·58	Manbhum	90,332	583·25
Shahabad	2,103	11·68	Singhbhum	35,315	465·01
Monghyr	15,309	75·42	Santal Parganas... ..	5,333	29·65
			Angul	26	1·42
			Sambalpur	1,402	17·76
			Orissa States	12,334	32·40
			Chota Nagpur States ...	230	15·08



The distribution of the population employed in these establishments by kinds of industry is given in the following table and diagram which show at a glance the predominant importance of the mining industry :—

INDUSTRY.	Population employed.	Per cent. of total population employed in industrial establishments.
Mines	127,178	57·51
Metal industries	34,239	15·59
Construction of means of transport	11,606	5·27
Food industries	10,248	4·66
Growing of special products	8,071	3·67
Chemical industries	7,033	3·20
Quarries of hard rocks	6,841	3·11
Glass, etc., industries	4,529	2·06
Wood industries	4,511	2·05
Others	5,668	2·58

PROPORTIONAL DISTRIBUTION BY INDUSTRIES OF PERSONS EMPLOYED IN INDUSTRIAL ESTABLISHMENTS					
INDUSTRY	10	20	30	40	50 PER CENT
II Mines					
VII Metal Industries					
XIII Construction of Means of Transport					
X Food Industries					
I Growing Special Products					
IX Chemical Industries					
III Quarries					
VIII Glass Earthenware &c					
VI Wood Industries					
Other Industries					

The discussion of the industries in the following paragraphs will follow the order in which they are presented in Table XXII.

I.—GROWING OF SPECIAL PRODUCTS.

51. Under this head are included tea plantations, indigo plantations and grass farms. The principal connexion of this province with the tea industry lies in the fact that it sends annually many thousands of emigrants to work in the tea-gardens of Assam and the Duars, but there are eight tea-gardens in the province itself, seven of them in Ranchi district. The total labour force employed is not quite 1,500 : of these the majority are women, and there is also a high proportion of female children employed. The leaf is plucked by women who are remunerated at the rate of 2 pice a seer, and earn 8 or 9 annas a day without much difficulty. Women are also employed in washing the leaf, while the children are employed in picking out the stalk and removing impurities, for which they earn 10 or 12 annas a week.

52. Only 65 indigo factories were returned with a total population employed of just over 6,000 as compared with 119 with over 30,000 employes in 1911. Muzaffarpur and Darbhanga each contain 17 such factories and the only other district to reach double figures is Saran (10). Owing to the competition with its synthetic rival the manufacture of indigo dye in Bihar has been on the decline for many years. When the war broke out, the German supplies of synthetic dye were cut off just at the time when a keen demand for dye had arisen for dying *khaki* cloth for the troops, and by 1918-19 the price of indigo was more than double than what it had been before the war. The area under indigo which had been 116,000 acres in 1910-11 had fallen by 1914-15 to 38,500 acres but thanks to the situation arising out of the war it rose again to 64,200 in

1918-19, only to fall once more to 44,400 acres in 1920-21. Many of the factories have now abandoned the cultivation and manufacture of indigo and turned their attention to *zamindari* and the cultivation of country crops. Such "factories" are no longer entered in the table as indigo plantations.

53. There are two grass farms in the province for the cultivation of *sabai* grass, one in the Santal Parganas and a larger one in Mayurbhanj. The grass is however usually cut in the jungle and not artificially cultivated, the value of the grass recovered from the Government forests in the province alone varying from Rs. 15,000 to Rs. 30,000 a year.

II.—MINES.

54. This is the most important industrial group in Bihar and Orissa and represents about 50 per cent. of the total industrial activities of the province. Of the total population of 127,178 supported by mining, 81 per cent. is employed

COAL MINES.

in connexion with coal mines, 4 per cent. with iron mines, 10 per cent. with mica mines, 3 per cent. with copper mines, 1 per cent. with manganese mines and the remainder in petty red oxide, kaolin and chromite mines. Coalmining is therefore the most important industry of the province; the Jherria coal-field in Manbhum, the importance of which is due to its accessibility and the superior quality of its coal, alone produces over 50 per cent. of the total annual output of coal in India. There are also enormous reserves of coal awaiting exploitation in some of the coal-fields further west in Hazaribagh, especially in Bokaro and North and South Karanpura, but on the whole the quality of the coal in the Damodar valley tends to deteriorate towards the west. Palamau, Sambalpur and Talcher State at present each boast of one coal mine, but the average population employed is small being 467 only. The Santal Parganas contain 11 coal mines in the valley of the Ajai and the Rajmahal hills which are even smaller, the average population employed being only 110. The two chief coal producing districts are Hazaribagh and Manbhum. In Hazaribagh the oldest established colliery area is at Giridih, where the most important collieries are those worked by the East Indian Railway, which employ over 8,000 persons in all. The labour employed in the railway company's mines unlike the labour of the Jherria field is entirely indigenous; there is not a single imported worker. "For many miles around the coal-field many of the villagers follow a dual occupation, working in their fields in the seasons of planting and harvesting and cutting coal for the rest of the time". The labour is directly employed by the company. "The miners and labourers have without any agitation on their part and with any help from labour combination attained an unique position".* Thanks to the institution of a self-supporting miners' benefit fund to which every man subscribes a farthing and every woman half a farthing a week, there are allowances for the sick and also on the occasion of births, deaths and marriages. The company pays 12 months' earnings to the family of a workman accidentally killed and makes itself responsible for persons crippled in its employment in addition to paying old age pensions. A condition of residence on the company's estate is that all male children under 12 must attend school and several hundred girls also attend. Attached to the colliery workshops is an industrial school open to boys who have passed the upper primary examination; these boys begin to draw a daily wage as soon as they join the school which increases as they learn to make themselves useful. The whole of the Giridih field only extends to 7 square miles and the only other workings of any importance are those of the Bengal-Giridih Coal Company, a subsidiary company of the Bengal Coal Company. Careful examination of the Bokaro coal-field has led to the opening of mines further west, three of which,—one jointly owned by the East Indian and Bengal-Nagpur Railways, one by the Great Indian Peninsula Railway, and one by the Bokaro and Ramgur Coal Company Limited of which the railway companies are sub-lessees—employ

* Hazaribagh District Gazetteer, pages 40-42.

just under 8,000 persons. The larger and more important Karanpura field is still undeveloped.

55. Although labour troubles at Giridih are not unknown, the policy followed by the East Indian Railway of employing entirely indigenous labour and looking after it has obviated the acute and recurrent labour shortage which has proved such a handicap at Jherria. The other coal mines of the province outside Manbhum are comparatively isolated and thanks to their isolation they have been preserved from this embarrassment. There is always the difficulty that, as Kipling wrote of the Giridih coal-field, the hereditary pitman has not yet been evolved: the miner is also a cultivator, whose attention at certain seasons of the year is diverted to other things. But at Jherria the greater part of the labour force has actually to be imported and the labour problem there is a far more formidable one.

56. According to the industrial census the total population employed in the coal mines of Manbhum was 82,619 of whom 347 were managers, 1,519 belonged to the supervising and technical and 1,482 to the clerical staffs, while 32,843 were skilled and 46,428 were unskilled workers. The following list which was drawn up before the census and circulated with the returns to all agents and managers of coal mines for guidance, contains a list of the different kinds of workers found in the mines and their classification into skilled and unskilled for the purposes of the census:—

JHERRIA COAL-FIELD.

SKILLED—

Engineering.—Mechanics.

Mining.—Miners, hookers-on, platelayers, shotfirers, sinkers, pit carpenters and proppers, overmen, sirdars,

SKILLED AND UNSKILLED. winding and hauling enginemen and firemen, pumpmen, masons, tindals and chargemen, brickmakers, and cokeplant operators.

UNSKILLED—

Fillers, trolley-men, and coolies of all kinds, *e.g.*, plate-layer coolies, baling coolies, carpenters' coolies.

Khalasis may be either skilled or unskilled.

57. Most of these kinds of labour are performed by men but women and children also find employment in the mines. The chief employment of the women is as help-mates to their husbands; while their husbands cut the coal they convey it in baskets to the foot of the incline or in some cases to the surface. As the coal-cutters are paid on the number of tubs they fill, their wives directly help them in their work and are a valuable economic asset; in fact, from the economic point of view, happy is the man who happens to have two of them. Women also work independently in gangs of so called "*dust kamins*," a form of employment which affords a useful occupation to women who are left unsupported. The women often take their infants down the mines in order to look after them but children are not employed below ground. Most of them are left to play in the coolie lines in charge of a grandmother or elder sister while their parents are at work, but some of them find employment on the surface as assistants to masons or in carrying baskets or other light jobs for which they are paid at the same rates as the *kamins*. In all 26,586 women (Manbhum 20,861) and 7,207 children of under 14 (Manbhum 5,445) were returned as being employed in the collieries: of these 1,395 women and 320 children were classed as skilled, most of them having been returned as "miners" which is one of the skilled occupations. It is probable however that these persons were really fillers and carriers and should have been classed as unskilled. Apart from them a handful of women and children are employed as brickmakers or masons.

58. The labour employed in the coal-field is not systematically recruited as it is for the tea-gardens. Each colliery makes its own arrangements. The

RECRUITMENT OF LABOUR.

small collieries often recruit direct, sending out *sirdars* for the purpose as necessity arises. The more usual practice followed by the larger collieries is to recruit through contractors; most collieries employ their own contractors, but there are a few large contractors in the coal-field who supply labour to more than one colliery. The contractor as a rule contracts not to supply labour but to cut coal and deliver it on the surface at a fixed price which allows him a profit of about 4 annas a ton on large contracts and 6 annas a ton on smaller ones. The contractor has often to make advances to the labourers of as much as Rs. 30 (representing 20 or 30 days' earnings) and has to take the risk of their bolting before the advances are paid off.

59. There has been a great rise of wages in the coal-field in the last twenty years. The essential part of the work is the coal cutting and this is

WAGES.

remunerated at so much per tub of 12 cwt. filled. In 1900 the usual rate per tub was 4 to 4½ annas : in 1910 the rate had risen to 5 annas : in 1920 the usual rate was 7½ annas though some of the petty mines which were working for the minute were giving fancy rates in order to attract labour at any cost. At this rate it is easy now-a-days for a local man and his wife to earn Re. 1-4-0 a day or more; up-country men, who generally address themselves to the work in a more business-like manner and work five days in the week, can earn as much as Rs. 3 a day or Rs. 75 a month, out of which they have large savings to remit home by money order. The unskilled men on fixed pay such as *khalasis*, who are persons of some experience and would be better described as semi-skilled, were paid about Rs. 8 a month in 1900, Rs. 10 to Rs. 12 in 1910 and Rs. 15 to Rs. 18 in 1920. The really unskilled work is on the surface and consists in such jobs as loading wagons or screening dust. The loading of a wagon occupies about three persons and the remuneration for it has risen from 10 annas in 1900 to 15 annas in 1910 and Re. 1-6-0 in 1921. The rates of wages of the "on cost" labour have also doubled in the last twenty years: for surface work the rates have gone up from 3 to 6 or 7 annas for a man and from 2 to 4 or 5 annas for a woman, while for work below ground the rate has risen from 4 to 8 annas for a man and from 2½ to 5 annas for a woman. The area of the coal-field is not great and the mines are close to one another so that news of any increase of rates in one mine rapidly spreads abroad and there is a strong tendency for rates to level themselves. The more highly skilled men such as mechanics are on fixed pay and earn as much as Rs. 50 or 60 a month. The labour is paid weekly, usually on Sundays; where it is employed through a contractor, the colliery settles with the contractor weekly and the contractor settles with the men whenever they finish their jobs and leave their work.

60. The pits are always open except on Sundays and the work is done in two shifts. The day shift lasts from 8 or 10 A.M. to 4 or 6 P.M. and the

HOURS OF WORK.

night shift from 10 P.M. to 6 A.M. Men who come in to work from neighbouring villages will usually work for two consecutive shifts, resting between the shifts in the casual labour lines, after which they will take 24 hours off. Men who come for a week or more on end will work in alternate shifts. When the Saturday night shift comes up on Sunday morning the mine is closed for the rest of the day. "After Sunday is over", wrote Kipling of the Giridih coal-field "the men generally lie off on Monday and take it easy on Tuesday. Then they work for the next four days and make it up". This is true to-day of Jherria, though the work is supposed to start again in full swing with the Tuesday day shift. The miners are under no obligation to be present and if they do not turn up no questions are asked. The result is that on bazaar days also the attendance is apt to fall off: even if the miner does not buy his food in the bazaar he likes to attend it with his wife and make petty purchase of cloth, tooth-picks, and so on. Up-country men, who come to make as much in as short a time as they can, will usually work for five or six days a week; the local miner used to work four or four and a half, but since the increase of wages in 1920 the complaint is heard that he will not work for more than three.

61. The castes of the unskilled workers for coal mines throughout the province will be found in Part V of Table XXII. The Bhuiyas and the Bauris together supply over two-fifths of the unskilled labour, and Santals, unspecified Muhammadans, Chamars, Kurmis, Dosadhs and

CASTE AND BIRTH-PLACE OF
WORKERS.

Goalas are also found in large numbers. These castes are chiefly of local origin: the Bhuiyas come mostly from Monghyr, Hazaribagh and Gaya: the Bauris, Santals and Kurmis from Manbhum itself; the Chamars come partly from Hazaribagh but in greater numbers from the Central Provinces; the Goalas come mostly from Hazaribagh and Monghyr and the Dosadhs from the same two districts and also from Gaya. Part IV of Table XXII relates to skilled workers. Here the coal cutters or miners are by far the most numerous class, representing over 25,000 skilled workers out of a total of 39,000. Amongst the miners the Santals (3,878) are the most numerous and are commonly considered the most efficient. They are followed by the Bauris (2,388), the only Bengali caste that takes kindly to coal cutting, the Chamars (2,008) and the unspecified Muhammadans (1,808), though across the boundary of Bengal in Raniganj the local Muhammadans will not cut coal at all. Ghatwals and Bhuiyas also engage in this work in considerable numbers. The Chamars from Raipur and Bilaspur in the Central Provinces, locally known as "Bilaspuris", are a well established feature of the labour force. Their connexion with the coal-field dates from the days when they were employed as earth workers on the construction of the track of the Bengal-Nagpur Railway: they stayed on to work in the mines and so the connexion was established. Ordinarily they bring their women with them, unlike the men from the United Provinces who come alone. The most numerous castes from the United Provinces are the Brahmans, Rajputs, Pasis, Goalas, Bhars and Chamars, who come from the districts on the banks of the Ganges from Unao to Allahabad and Jaunpur in which, owing to systematic recruiting in time past for the collieries at Singareni and in Rewa State, there is now a reserve of trained labour available. These Brahmans and Rajputs are largely employed as *sirdars* though up-country men of these castes do not object to cutting coal. The Pathans, who also come without their women-kind, are another notable feature of the population. They are for the most part engaged as petty contractors: they are confirmed gamblers and are not altogether welcome in the collieries.

62. It is a well-worn statement that the coal miner is an agriculturist who only turns to coal mining when force of circumstances drives him to seek some means of subsistence other than the fields.

FLUCTUATIONS IN LABOUR SUPPLY. In July and August when the paddy is being transplanted and in November when it is being cut the mines are almost invariably working short-handed. Anything in the nature of scarcity in the neighbouring districts is a blessing to the coal-field. The returns of the Jherria Mines Board of Health show that in the third-quarter of 1918 the labour population of the collieries was about 65,000. When the rains failed in September of that year the number began to rise; in the last quarter of 1918 the population numbered 80,000 and in the first quarter of 1919, when the pinch of scarcity was actually felt, it reached 100,000. The collieries therefore had very little trouble in connexion with their labour in 1919, but when the agricultural situation improved in 1920 constant complaints were again heard of shortage of labour. Attempts were made to meet the difficulty by increasing the rates of remuneration but the result was not successful. The miners have a certain standard of comfort and show little desire to raise it: when they find they can earn all they want by working fewer days in the week they limit their work to that number of days. In 1920, in spite of increased rates of pay, the average daily attendance fell off and the average output for working below-ground fell also. There is small ground for surprise if the miner, who is accustomed to the peaceful life of his native village, looks upon the prospect of settling permanently in the coal-field with aversion. A committee appointed in 1917 by the local Government to enquire into the housing of labourers on the collieries of Bihar and Orissa was of opinion that "there are no amenities in the coal-field.....The *dhauras* (lodgings) are neither beautiful nor healthful. The labourer enjoys no privacy in his domestic life. He has to carry his personal belongings about

with him (even down the mine) for fear of theft. His only pleasure is that which is to be purchased at the liquor shop. There is no inducement for him to remain at the colliery for a minute longer than he can help". The more enlightened coal-owners house their labour in masonry *dhauras* with a roofing of tiles, concrete or brick arches, but not all *dhauras* are up to this standard, though the Mines Board of Health has already done a great deal to remove the worst of the aggregations of huts. But still it is easy to understand why the miner, even when housed in a perfect *dhaura* with every modern convenience, does not regard the life as one in which he would like his sons and sons' sons to engage. The committee of 1917 estimated that only 15 per cent. of the colliery labourers in the Jherria field and those generally Santals were "settled" in the sense that they had been provided with cultivation and had built their own houses on the collieries (in the Raniganj field in Bengal the proportion is about 50 per cent.): of the remainder 75 per cent. were found to come for weeks or months together and live in the *dhauras* while the remaining 10 per cent. lived in their own villages within a few miles of the mines and came to their work daily or when it suited them. Various suggestions have been offered as to the possibility of attracting a more regular force of labour to the coal-field, but the chief difficulty in giving effect to any of them has always been the lack of combination between the various collieries and no concerted action has ever been taken. There is no sign of a class of hereditary pitmen divorced from agriculture coming into existence: to induce a family to settle they must be provided with land for cultivation and the restricted area on the surface of the Jherria field available for cultivation makes it impossible to settle the miners as is done at Raniganj or even more so at Giridih. Systematic recruitment and increased amenities will undoubtedly assist in attracting labour to Jherria, but no simple and final solution of this perennial difficulty is likely to be found.

63. Of the iron mines in the province two are in Singhbhum and two in the adjoining state of Mayurbhanj. The vast iron-ore deposits of this neighbourhood represent one of the most important resources of the province and the 4,978 persons at present employed in the iron mines will doubtless increase in the years to come. The ore is in such quantities and so accessible that the mining, consisting as it does in removing hill sides in a systematic manner, presents no special feature of interest. The miners have been returned as unskilled and the labour is local. The mines in Mayurbhanj are the property of the Tata Iron and Steel Co. Ltd., and those in Singhbhum of the Bengal Iron Co. Ltd.

64. More than half of the world's mica supply comes from India, and more than half of the Indian supply comes from Bihar and Orissa. The uses to which mica is put and the demand for it have much increased in recent years; being a non-conductor it is principally used for insulating purposes in connexion with electrical installations of all kinds; but it is also used for boiler and pipe-lagging, as a lubricant, and for wall papers and paints. During the war there was an abnormal demand for mica of the better qualities for compass-cards, long distance telegraph and telephone installations and above all for insulating the stays of aircraft: Government took control of the industry from 1916 to 1918 and export was restricted except to the United Kingdom. The marginal table shows the number of persons employed in registered mica mines in the province year by year during the last decade: but owing to the manner in which mica is worked in small pits in the jungle, not all mines are registered and the number of persons employed was probably greater than the statement shows. The effect of the war upon the industry is clearly shown in the statement. In 1911-12 40,228 cwts. of mica were exported from Bihar and Orissa, valued at £ 166,186 or £ 4.13 a cwt.: in the following year the output and the value increased, but after that it fell off till 1916, when the urgency of the demand for war purposes became insistent. The greatest output was in 1917-18 when it was

YEAR.	No. of persons employed in mica mines in Bihar and Orissa.
1911	11,795
1912	11,973
1913	12,314
1914	11,384
1915	7,595
1916	11,930
1917	16,202
1918	21,364
1919	18,100
1920	16,351

55,946 cwt. : in 1918-19 the output decreased to 46,446 cwt., but the value rose to £ 11-4-6 a cwt. or £ 532,384 in all. In these years mica mining and prospecting were at their zenith, but since the war the demand has fallen off and many of the mica mines have been closed down, which accounts for the total population engaged in mica mines in 1921 being not quite 13,000. At the time of the census 81 mines were working in Hazaribagh, 9 in Gaya, and one each in Ranchi and Manbhum, but those in Monghyr were all closed.

65. Some of the larger mines are now worked on scientific lines, being laid out with inclines and vertical shafts, and mechanical power is used in the form of compressed air drills; twelve out of 92 mines were returned at the census as using mechanical power of some kind. But for the most part the mining is conducted in shallow pits in the jungle, the mine consisting of a narrow winding hole leading from "book" to "book" of mica, and 60 of the total number of mines employed less than 100 persons. Mining of this description offers a welcome outlet for the energy of the local labouring classes and through the difficult times of 1919 there was a general movement of labourers into this neighbourhood. The men dig in the pits and women and children assist in raising the mica. waste rock and water to the surface by hand, the proportion of carriers to miners varying with the depth of the mine and nature of the soil. The women usually come with their husbands and children with their parents, but sometimes they come with parties of fellow villagers. The labourers usually live in their villages, but where the mine is remote the employers provide coolie lines free of rent. The hours of work are usually about 8 hours, from 10 A.M. to 6 P.M. Wages are calculated at so much a day, but are paid weekly or fortnightly. Before the war men earned 3 or 4 annas a day : now they earn 4 to 6 annas : women get between 2½ and 5 annas (usually 15 pice) and children from 2 to 3 annas. Generally it may be said that no labourer is solely dependent for support on his work in the mines : practically the whole labour force is engaged in cultivation from June to October. The labour is almost entirely local; most of the local labouring castes engage in this work particularly Chamars, Muhammadans unspecified, Musahars, Rajputs and Santals. Ordinarily no difficulty is experienced in obtaining labour, but when the demand for mica is insistent and the rival claims of cultivation have to be met, it becomes necessary to go further afield and *sirdars* are then sent out with advances to collect labourers. Miners have, whenever it has been possible to identify them, been classified as skilled, but it is clear that the degree of skill required of a mica miner is not great and a good many men have probably been returned as unskilled who are really miners. The proportion of women and children employed is fairly high for, in addition to assisting in the pits, they do much of the splitting and some of the sorting. Of the 1,391 splitters, 874 (including 396 females) were adults and 517 (including 280 females) were children of under 14.

66. There is one privately owned manganese mine at Gariajore in Gangpur State which employs 1,516 persons. Work here began in 1908 but by 1915 the outcrop portions of the deposit had been removed and work came to a stand still. The mine then changed hands and since 1916 the ore has been obtained by systematic, deep workings. Manganese has also been worked spasmodically in Singhbhum since 1906, but no mine was working at the time of the census.*

MANGANESE MINES.

67. All the other mines in the province are on a very petty scale except the copper mines in Singhbhum. Deposits of copper ore are known to exist in various places in the province, but so far their working has only attained a commercial scale in Singhbhum where the Cape Copper Co. acquired the interests of the Rajdoba Mining Co. in Swaspur police-station in 1912. After five years' working the main shaft had by 1918 reached a depth of over 1,000 feet and a refining plant was completed in the same year. 2,694 persons were employed in the mine and the smelting works at the time of the census, of whom 1,232 were working in the mine and the ore sorting department. The unskilled labour is almost entirely local and consists of Ghasis, Santals, Bhumij, etc.; amongst the skilled labour there is a strong element of Madrasis. The second mine is

COPPER MINES.

* See "The Mineral Resources of Bihar and Orissa" by DOCTOR FERNOR.

the Mosaboni mine of the Cordoba Copper Co. Ltd. in the same district at which over 400 persons are employed, nearly all of them Santals.

III.—QUARRIES OF HARD ROCKS.

68. Under this head there are 45 establishments returned with a total population employed of 6,841 or an average of 152. One third of these (33) with one third of the population (2,450) are stone quarries in the Santal Parganas, which accounts for the number of Santals so employed. The two dolomite quarries in Gangpur State, from which the Tata Iron and Steel Company obtain dolomite to be used as flux in the manufacture of pig-iron, and Messrs. Ambler's slate quarry in Monghyr are the only establishments of any size and together they account for more than half of the persons employed under this head. The labour is practically entirely local, though a certain number of labourers find their way from the Central Provinces to the quarries of Gangpur.

QUARRIES.

IV.—TEXTILE INDUSTRIES.

69. Organized textile industries in factories are very unimportant in Bihar and Orissa. The 30 establishments of this description altogether only employ 1,088 persons. Of these 30, 17 are petty jute presses in Purnea working for a certain season of the year and employing on the average 17 persons each. The 4 cotton weaving mills employ 26 persons apiece on the average. The important textile industries of the province are those carried on as home industries which have already been discussed in the first section of this chapter in connexion with the occupational columns of the general schedules.

TEXTILE INDUSTRIES.

V.—LEATHER INDUSTRIES.

70. There is a leather factory in Ranchi employing 14 persons and three tanneries in Cuttack employing 202 persons in all. Vast quantities of hides and skins are exported annually from Bihar and Orissa : in 1916-17 the value of hides and skins exported was Rs. 159 lakhs, but in 1920-21 the value had fallen to Rs. 74 lakhs. These hides and skins are roughly cured by the village Chamar before export but, possibly owing to the aversion of all but a few Hindu castes from work in tanneries, very little attempt is made to work up the raw material locally. The four establishments that there are in existence to-day are entirely owned and managed by Indians.

LEATHER INDUSTRIES.

VI.—WOOD, ETC., INDUSTRIES.

71. Under this head are included 5 carpentry works, 4 saw mills, 28 timber yards and 3 factories of *narial gatta* pipes. Of the carpentry works two are missionary institutions, and the only establishment of any size is one at Jamshedpur which employs 443 persons in the manufacture of doors, lintels, window-frames, etc., for the new houses that are being erected in the town. Of the saw mills one only employs as many as 100 persons and that is partly a *surkhi* mill. Of the 28 timber yards over half (16) are in the Feudatory States, the largest, which employs over 2,000 hands, being in Mayurbhanj. In the densely cultivated districts of Bihar there are occasional mango groves but there is no room for forests workable on a commercial scale. The three factories in which *narial gatta* pipes (*alias* hubble-bubbles) are manufactured at Muzaffarpur employ on the average just over 11 persons each and were only just large enough to be included in the census.

WOOD INDUSTRIES.

VII.—METAL INDUSTRIES.

72. Seven establishments only, employing 344 persons, were returned as iron foundries and of these 2 were returned as iron foundries combined with flour and oil mills and 2 others as iron and brass foundries combined. Four of the five iron and steel works in the province are also very petty as they employ altogether only 66 persons : the articles manufactured in these works are steel trunks and in one case sword-sticks. The works of the Tata Iron and Steel Company

METAL INDUSTRIES.

Limited at Jamshedpur on the other hand, which form the largest single establishment in the province, have been conceived on a vast scale and require separate consideration.

73. Some account of the origin and growth of the town of Jamshedpur has already been given in Chapter II. The works of the Tata Iron and Steel

JAMSHEDPUR.

Company form the greater part of the town and to give an account of the population employed in the works is to give an account of the population of the fourth largest town in the province. Apart from the more highly skilled workers who are obtained from further afield labour is recruited chiefly from the neighbourhood and the Central Provinces, while a good many *khalasis*, as the superior type of coolie is called, come from Orissa and the neighbourhood of Vizagapatam. Amongst the local "*junglis*", the Hos have on the whole the best reputation, and then the Santals and Bhumij. These men have proved their skill at straightening rails, laying railway tracks and various other manual jobs requiring accuracy of vision and have risen in a few cases on their merits from being coolies to earning as much as Rs. 50 and Rs. 60 a month. The Chattisgarhias from the Central Provinces are on the whole less satisfactory workers; many of them have been coming to the works in a half-starved condition, but with good food and plenty of work they have improved in physique and efficiency. In addition to the labour employed in the works, the outside contractors employ a large labour force. It is noticeable that very few Oraons take employment under the company. This industrious race prefer piece-work which they find outside under the contractors, and even their womenfolk earn as much as 12 annas a day in this way. The Oraons and the Bhuiyas also are often to be found working as brick-moulders in the town. Over 5,000 unskilled women are employed in the works in fetching and carrying or in shovelling: they usually come in batches with their husbands or their fellow-villagers and live with them in the coolie towns. Most of them take their babies with them into the works, but a *crèche* is provided in which babies can be left in charge of a matron. Children are only employed in a small scale. The present rates of wages were fixed after the strike in March 1920 and are sufficient to attract labour without any special system of recruitment. No one at present earns less than 5 annas a day. At the cultivating seasons the number of labourers falls off but no embarrassment has yet been felt on that account. The labourers are under no obligation to stay and work, but for 26 days' continuous work they get a bonus of one day's wages and a bonus of 2 days' wages for 27 consecutive days. The coolies get plots of land for which they pay ground rent and on which they build themselves houses. They get rice at cheap rates through the welfare department and cloth from the cloth stores. They get free medical attendance and free education for their children. The proportion of local workers who have definitely settled down to an industrial career divorced from agriculture is small; a local estimate puts it at 10 per cent. The general shift is from 6 to 11-30 A.M. and again from 1-30 to 5 P.M. In addition to this the work is kept up continuously by means of the "A shift" which lasts from 6 A.M. to 2 P.M., the "B shift" which lasts from 2 to 10 P.M., and the "C shift" which lasts from 10 P.M. to 6 A.M.

74. The works are divided into various departments, of which the most essential are the blast furnaces, the steel works or open hearth and the rolling mills. The blast furnaces which produce the iron and of which 3 were in working order at the time of the census, employ a labour force of about 1,600 persons. There are 9 hands of European or allied race, chiefly Americans, and under them work a small army of more or less unskilled workers, all males, such as pig-iron breakers, who earn from 10 annas to Re. 1 a day, and hot-iron breakers who earn from 12 annas to Re. 1-9-6. Most of these men are local, but a good many come from Orissa, Vizagapatam and up-country and there is a group of Khatriya *khalasis* from Surat.

The steel works or open hearth employ some 2,300 men, from 1st smelters on as much as Rs. 720 a month down to the lowest paid furnace helper on 12½ annas a day. Before the war the most highly skilled workmen in this department were usually recruited from Germany, but since their removal their places have been taken partly by Americans and partly by Englishmen.

There are 34 skilled hands of European or allied races working as smelters in this department; in the lower ranks there is a fair sprinkling of Brahmans, Rajputs, Goalas, and unspecified Muhammadans, many of them from the United Provinces and the Central Provinces.

The rolling mills employ some 2,500 hands. In this department there are 28 workmen of European and allied races, amongst whom the Yorkshire element is strong, and 11 Anglo-Indians. But Indians too are acquiring a high degree of skill at the work and there is an Indian roller in the bar mill who is drawing over Rs. 300 a month. Their pay varies between this figure and Rs. 2-1-6 a day. Apart from the rollers, which category includes assistant rollers, guide setters, coppers and roll turners, the other most numerous class of skilled operative in this department is the straighteners; originally Europeans were employed on this work but the local Hos and Santals have proved themselves to be naturally expert at it and they have now taken it over and earn anything from 7½ annas to Rs. 2-14-9 a day. In the finishing mills also the local labourers have risen from ordinary coolies to being mates and mixer-men earning from Rs. 50 to Rs. 60 a month.

75. These three departments may be regarded as the essential departments, but there are a number of others. The coke ovens in which the coal is treated on arrival at the works and bye-products extracted in the shape of tar and ammonia sulphate employ just under 1,000 persons. There are a handful of skilled foremen and under them more or less unskilled labourers, such as quenchers on 10 annas or 11½ annas a day. A number of women, Hos and Santals, find employment here as shovellers at which work they are better than men. The electrical department also employs just under 1,000 hands but here the work requires a higher degree of skill. Amongst the fitters Kamars, Sikhs, Muhammadans and Brahmans are important and amongst the electricians Brahmans and Kayasths. The pattern shops, in which the most highly skilled carpenters are found, employ over 200 men: the most skilled of all are the Chinamen of whom there are 20 on Rs. 3-9-0 a day, while Indian carpenters, most of them Barhis, earn from Re. 1-8-0 to Rs. 2-3-0 a day. The foundry employs about 1,000 hands: in this department the moulders, of whom about half are Muhammadans, earn from 14 annas to Rs. 2-5-9 a day while their helpers earn from 7 annas to Re. 1-1-3. In the mechanical department also, especially amongst the fitters, Muhammadans are numerous and Sikhs, but Brahmans, Kamars, Kurmis and Rajputs are also important.

76. The "Greater Extensions", as the new furnaces and mills still under construction are called, employ over 5,000 men. In the works as a whole the castes that provide most of the skilled workers are Muhammadans (1,936), Rajputs (1,008), Brahmans (897), Kayasths (729), Kamars (395), Sikhs (336) and Goalas (311) and amongst the unskilled Telis (1,826), Mundas (1,329), Muhammadans (1,070), Goalas (657), Santals (589), Rajputs (428), Bhumijs (397), Hos (393) and Tantis (367) in that order.

77. Under the head of "Machinery and Engineering Workshops" are included 39 establishments employing 8,181 persons. The workshops of the East Indian Railway at Jamalpur have been included under the head of "Railway Works", but the other railway workshops of the province which are of a petty description and execute repairs have been grouped under this head. Of these the most important is the workshop of the Bengal and North-Western Railway at Samastipur in Darbhanga district which employs 927 persons: in all 18 small railway workshops of this description employing in all 4,334 persons have been included. The other workshops under this head consist of 3 industrial schools, 2 workshops of the Public Works Department, and various other establishments of which the most important are the Calcutta Monieth Company's works at Jamshedpur and Messrs. Arthur Butler and Company's works at Muzaffarpur. Nearly half of the labour employed is skilled and of the skilled workers about one-third are Muhammadans who are commonly employed as fitters, firemen and drivers, Kahars are also largely employed, as well as Kamars, Goalas and Barhis. Over two-thirds of the skilled labour is drawn from this province and the greater part of this comes from the district in which the works are situated;

MACHINERY AND ENGINEERING
WORKSHOPS.

Bengal and the United Provinces are the only other sources of skilled labour of any importance. Amongst the unskilled workers, who are almost all of local origin, Muhammadans, Goalas, Kahars, Santals, Kamars and Dosadhs are most numerous.

78. There is only one other establishment under the head of metal industries, a small graphite factory at Bisra in Gangpur State at which
OTHER METAL INDUSTRIES. graphite obtained from Kalahandi State is picked, sorted and crushed. A tin works employing 363 persons and a zinc works employing 730 persons were also under construction at Jamshedpur at census time : of these the latter has since been abandoned.

VIII.—GLASS AND EARTHENWARE INDUSTRIES.

79. Under the head of Glass and Earthenware Industries there are only 18 establishments employing 4,529 persons. Most of these are brick
BRICK AND TILE FACTORIES. factories Bricks are freely burnt all over the province where the soil is suitable and the kilns are a common object of the landscape. But they are burnt on a small scale as required and it is not usual for an establishment for burning bricks to satisfy the requirements of an "industrial establishment" as defined for census purposes; only 13 such establishments were actually returned. The two largest were at Jamshedpur where the demand for bricks for building new houses had led to their being manufactured on a large scale. The skilled labour employed is entirely male, but amongst the unskilled, whose work is primarily the carrying of head-loads, women are the more numerous. There is one small state-owned tile factory in Bamra State. In Manbhum there are 4 establishments for the manufacture of fire-bricks : of these the largest, at Kumardhubi, employs 1,117 persons, another employs 493 and the two others are small.

IX.—INDUSTRIES CONNECTED WITH CHEMICAL PRODUCTS.

80. "Industries connected with Chemical Products" give employment to 7,033 persons in 171 different establishments. Thirty-three of these are
SALT-PETRE REFINERIES. salt-petre refineries, most of them in Saran and Muzaffarpur employing on the average 17 persons apiece, and of these 33, ten work only at certain times of the year. These works are on a very small scale, but the salt-petre industry, which is of considerable importance in Bihar, is a cottage industry which the Nuniya pursues in his own village, as has already been explained in the first part of this chapter.

81. There are 20 oil mills in the province, most of them on a small scale, producing mustard or other vegetable oils, some of them being combined
OIL MILLS. with rice mills and flour mills. The average number of persons employed is 44. The capital required for starting a mill of this description is not great. All except three are owned privately by Indians, and Europeans or Anglo-Indians are only concerned in the ownership or management of one concern. The mechanical power is usually supplied by small steam-engines.

82. Apart from a small soap factory at Bhagalpur and a small paint works at Puri, each employing 31 persons, and the Government vaccine
LAC FACTORIES. factory near Ranchi which employs 29 persons, the only other kinds of establishment under this head are lac factories and coke ovens. Of lac factories there are 111 employing 4,363 persons of which nearly half are in Manbhum. All are privately owned except one : of these 8 are the private property of Armenians and 102 of Indians, of whom 100 are Hindus and only 2 Muhammadans. Only four factories use power of any kind, most of the work being done by hand. Of the workers one third are skilled and they are almost entirely males belonging to this province, though some come from Mirzapur in the United Provinces and Bankura in Bengal. Amongst the skilled workers the most characteristic are the *karigar* or roaster, who melts the lac in front of the fire,

and the *belwaiya* or stretcher, who spreads the melted lac on the porcelain cylinder and then stretches it out into a thin sheet, seizing with his teeth, fingers and toes. As *kurigars* Muhammadans are most commonly employed, then Kandus and Chamars; as *belwaiyas*, Muhammadans, Bauris, Kandus, Kamars and Chamars. In view of the fact that Hindus sometimes raise religious objections to working in lac it is noteworthy that Brahmans and Rajputs are employed in both capacities though in small numbers. Amongst the unskilled workers women are nearly as numerous as men: Muhammadans are again the most numerous, being followed by Chamars, Bhuiyas, Koiris, Mundas, Bauris and Goalas. The lac factories as a rule work only when the crop has been collected and 100 of the 111 factories were returned as seasonal.

83. The fact that coke ovens employing nearly 1,000 persons form one department of the Tata Iron and Steel Works at Jamshedpur has already been mentioned. Coke ovens are also installed at the collieries of East Indian Railway at Giridih and at three places in the Jherria coal-field. Apart from the coke valuable bye-products are produced at all these ovens, except one which is on a very petty scale, in the shape of tar, ammonium sulphate, and benzol. A high proportion of women are employed in the Jherria coke ovens, shovelling being work at which they are adept.

COKE OVENS.

X.—FOOD INDUSTRIES.

84. The flour, rice and pulse mills, 17 in all, included under this head employ an average of 34 persons each and are small establishments rather on the lines of the oil mills. With two exceptions all are in Bihar, and with two exceptions all are privately owned. Of the 17 mills 14 are equipped with small steam engines.

FLOUR, ETC., MILLS.

85. There are 41 sugar factories employing 4,948 persons. They are most numerous in Shahabad (15), 14 of them being in Dehri *thana*, but there they are small, employing in all only 236 persons. All 15 are privately owned by Indians and none of them use mechanical power. Bihar in the cold weather is full of cane-crushing machines driven by bullocks thousands of which are hired from firms such as Messrs. Renwick of Kushtia and pass from hand to hand at the crushing season; the Shahabad sugar factories and some of the others also are simply places at which machines of this description had been set up on rather a larger scale than usual. Only ten factories employ a staff of over 100 persons—the largest being the Marhaura sugar factory in Saran which employs 747. Seven factories are owned by registered companies, six of them by companies with European or Anglo-Indian directors and the remainder by private persons, almost exclusively Indians. Three only of the factories work all the year round.

SUGAR FACTORIES.

86. In addition to the four distilleries mentioned in the table the sugar factory at Marhaura in Saran is also a distillery. The 7 water-works are all municipal water-works except the largest, the Jherria water-works; these consist of a dam thrown across one of the valleys in the folds of Parasnath hill at Topchanchi in Manbhumi, immediately north of the Grand Trunk road, whence the impounded water will be distributed by pipes to the coal field. When the supply is in full working order 2,400,000 gallons a day will be supplied in this way. At the time of the census 1,579 persons, mostly unskilled were engaged on the head-works. Although water had not actually been distributed, the works which have been under construction for seven years were approaching completion: the head-works are a more or less established institution of the neighbourhood and were therefore included in the census.

DISTILLERIES AND WATER-WORKS.

87. All the 30 establishments returned as tobacco, cigarette and *kath* factories are small with one exception, *viz.*, the cigarette factory of the Peninsular Tobacco Company Limited at Bansdeopur near Monghyr, the property of a registered company with European directors. This factory is run on modern lines and employs 1,597 persons including a

TOBACCO, CIGARETTE AND KATH FACTORIES.

European manager and 29 Europeans or Anglo-Indians on the supervising staff. The labour, skilled and unskilled, is almost entirely local and lives mostly in the town of Monghyr. The output of this factory is about 1,500,000,000 cigarettes a year.

XI.—INDUSTRIES OF DRESS.

88. There are three tailoring works in the province. One is the property of a Chinaman, who also makes shoes and furniture, the furniture probably representing the most important part of his business. In this establishment 25 Chinamen are employed. Another is owned by two Goanese and the third by a Bengali Brahman. These three works employ 103 hands, all males. Such tailoring workshops as there are are therefore not under native control: the local tailoring is done by the *darzi* as a home industry, while clothes of European cut are usually imported from Calcutta. The two button factories in Champaran represent an interesting attempt to make pearl buttons, studs, links, etc., out of the mussel shells found in the river Gandak. One of them is owned by a private company with 84 share-holders and the other by a Hindu proprietor. As a bye-product shell grit is produced for poultry. The labour, consisting of designers, borers, punchers and polishers, is chiefly local: one factory employs 199 persons and the other 51. No mechanical power is used.

XII.—INDUSTRIES CONNECTED WITH BUILDINGS.

89. Of the 11 lime works all except one are owned by registered companies and of these 4 have entirely and 3 have partly European or Anglo-Indian directors. Six are in Shahabad and three in Manbhum. They employ in all 1,701 persons of whom two thirds are males. It may be mentioned here that a large cement works at Japla in Palaman district was under construction at the time of the census to which limestone from the Kaimur hills in Shahabad is going to be transported across the Sone by an aerial ropeway. The concrete pipe factory at Jamshedpur turns out pipes of reinforced concrete known after their inventor as "Hume pipes". The works at present employ only 34 persons, including 8 skilled and 21 unskilled male operatives, one woman and one boy. The works are the property of a registered company.

XIII.—CONSTRUCTION OF MEANS OF TRANSPORT AND COMMUNICATION.

90. Under this head there are four establishments, three small motor works and the workshops of the East Indian Railway at Jamalpur.

The Jamalpur workshops employ in all 11,527 persons of whom 3,978 are skilled and 7,083 are unskilled operatives. No definite distinction of skilled and unskilled is recognized locally and therefore after discussion with the manager it was decided to treat as skilled all persons drawing Rs. 20 a month or over. According to this classification all persons of the coolie type with no special qualifications were treated as unskilled while the men, generally on a time-scale of pay, who start as unskilled and become skilled as the result of practical experience in the works, were treated as skilled if they had reached the Rs. 20 level. The more highly skilled mechanics, fitters and so forth have all been treated as skilled.

As in the case of their collieries at Giridih the railway company have solved the housing problem by relying to a very great extent on the surrounding villages for their unskilled and semi-skilled labour. About 5,000 of the staff including the European and Anglo-Indian operatives and the clerical staff live in the town of Jamalpur but the remainder live mostly in the villages along the "loop line" between Kajra and Sultanganj stations. Workmen's trains run daily to bring them to their work in the morning and take them

home again in the evening, the shifts at the works being from 7 to 11 and again from 12 to 4 and on Saturdays from 7 to 12. (Sunday is a holiday.) The workers therefore still maintain their connexion with the land; they usually belong to agriculturist families the other members of which cultivate the family holding. The result is that at the seasons when the demand for labour in the fields becomes insistent, the attendance at the works tends to fall off, but with the recent increases of pay attendance at the works is more remunerative than it was and the tendency to absenteeism is less marked than it used to be. The rates of wages have gone up since the war. Prior to August 1914, unskilled men with no special qualifications drew Rs. 6 and women Rs. 4; in April 1919 the men's rates were increased to Rs. 8 and the women's to Rs. 6; since then there have been two more increases and the men now draw Rs. 14 a month, women being no longer employed in the workshops. These wages, which are paid monthly, are more than the ordinary scale of labourers' wages that obtains in the villages, and no difficulty has been experienced in securing labour since 1914 when the system of recruitment through contractors was abolished; the labour is now recruited direct at the gate without middlemen and without difficulty. The men are under no obligation to stay except that those on Rs. 15 a month and over who join the provident fund are required to execute a stamped agreement which requires a month's notice of quitting service on either side. Apart from the provident fund there is a system of retiring gratuities, for good, faithful, efficient and continuous service; free medical treatment is also provided. As the result of the policy of the railway company the labour is predominantly local in origin: amongst the skilled labourers 81 per cent. and amongst the unskilled labourers 93 per cent. were born in Monghyr district. Amongst the skilled workers the most numerous castes are unspecified Muhammadans, Goalas, Barhis, Lohars, Kandus and Chamars while Anglo-Indians also are numerous. Amongst the unskilled the Goalas, Muhammadans, Dosadhs, Koiris, Brahmans, Telis, Rajputs and Kahars all contribute over 200 persons.

XIV.—PRODUCTION, APPLICATION AND TRANSMISSION OF PHYSICAL FORCE.

91. Wherever there is a demand for ice in this province on a considerable scale it can easily be supplied by rail from Calcutta so that there are only two petty local ice factories. Electrical works
ICE FACTORIES AND ELECTRIC WORKS. only number three, two at Patna and one at Jamalpur: the two small works at Patna are the property of Government while the works at Jamalpur are the property of the East Indian Railway and supply electric current to the works and the town. There are a number of electrical installations in industrial establishments where the electrical department does not form a separate establishment, as for instance at Jamshedpur where the electrical department employs nearly 1,000 hands and supplies power to some of the "subsidiary" companies also. In all 32 establishments supply themselves with electrical power while 17, either in the Jherria coal-field or at Jamshedpur, receive it from other establishments which generate it for their own purposes.

XV.—INDUSTRIES OF LUXURY.

92. There are 36 printing presses in the province of which 8 use power and 28 do not. Most of the presses are on a very small scale; 17, or nearly half, employ less than 20 persons and 27, or three-quarters, employ less than 50 persons. Thirty
PRINTING PRESSES. presses are privately owned and of the remainder three, including a jail press, are the property of Government. The total number of persons employed in all the 36 presses of the province is 1,605 only.

APPENDIX.

Group No.	OCCUPATION.	Group No.	OCCUPATION.
1	2	1	2
	<p>Class A.—Production of Raw Materials.</p> <p><i>Sub-Class I.—EXPLOITATION OF ANIMALS AND VEGETATION.</i></p> <p>ORDER 1.—PASTURE AND AGRICULTURE.</p> <p>(a) Ordinary cultivation.</p> <p>Income from rent of agricultural land. Ordinary cultivators. Agents, managers of landed estates (not planters), clerks, rent collectors, etc. Farm servants. Field labourers.</p> <p>(b) Growers of special products and market gardeners.</p> <p>Indigo growers. Tea, coffee, cinchona and rubber plantations. Fruit, flower, vegetable, betel vine, areca nut, etc., growers.</p> <p>(c) Forestry.</p> <p>Forest officers, rangers, guards, etc. Wood-cutters, firewood, catechu, rubber, etc., collectors, and charcoal burners. Lac collectors.</p> <p>(d) Raising of farm stock.</p> <p>Cattle and buffalo breeders and keepers. Sheep, goat and pig breeders. Breeders of other animals (horses, mules, camels, asses, etc.). Herdsmen, shepherds, goatherds, etc.</p> <p>(e) Raising of small animals.</p> <p>Birds, bees, etc. Silk worms.</p> <p>ORDER 2.—FISHING AND HUNTING.</p> <p>Fishing. Hunting.</p> <p><i>Sub-Class II.—EXPLOITATION OF MINERALS.</i></p> <p>ORDER 3.—MINES.</p> <p>Coal mines. Petroleum wells. Mines and metallic minerals (gold, iron, manganese, etc.).</p> <p>ORDER 4.—QUARRIES OF HARD ROCKS.</p> <p>Mica. Other minerals (jade, diamonds, limestone, etc.).</p> <p>ORDER 5.—SALT, ETC.</p> <p>Rock, sea and marsh salt. Extraction of saltpetre, alum and other substances soluble in water.</p> <p>Class B.—Preparation and Supply of Material Substances.</p> <p><i>Sub-Class III.—INDUSTRY.</i></p> <p>ORDER 6.—TEXTILES.</p> <p>Cotton ginning, cleaning and pressing. Cotton spinning. Cotton sizing and weaving. Jute spinning, dressing and weaving. Rope, twine and string. Other fibres (cocoanut, aloes, flax, hemp, straw, etc.). Wool carding and spinning. Weaving of woollen blankets. Weaving of woollen carpets. Silk spinners. Silk weavers. Hair, camel and horse hair. Dyeing, bleaching, printing, preparation and sponging of textiles. Lace, crepe, embroideries, fringes, etc., and insufficiently described textile industries.</p>	<p>Class B.—Preparation and Supply of Material Substances—continued</p> <p><i>Sub-Class III.—INDUSTRY—continued.</i></p> <p>ORDER 7.—HIDES, SKINS AND HARD MATERIALS FROM THE ANIMAL KINGDOM.</p> <p>Tanners, curriers leather dressers, leather dyers, etc. Makers of leather articles, such as trunks, water bags, saddlery or harness, etc., excluding articles of dress. Furriers and persons occupied with feathers, and bristles; brush makers. Bone, ivory, horn, shell etc., workers (except button).</p> <p>ORDER 8.—WOOD.</p> <p>Sawyers. Carpenters, turners and joiners, etc. Basket makers and other industries of woody material including leaves, and thatchers and builders working with bamboos, reeds or similar materials.</p> <p>ORDER 9.—METALS.</p> <p>Forging and rolling of iron and other metals. Makers of arms, guns, etc. Other workers in iron and makers of implements and tools, principally or exclusively of iron. Workers in brass, copper and bell metal. Workers in other metals (tin, zinc, lead, quicksilver, etc.) except precious metal. Workers in metals, die-makers, etc.</p> <p>ORDER 10.—CERAMICS.</p> <p>Makers of glass and crystal ware. Makers of glass bangles, glass beads, necklaces and glass earstuds, etc. Makers of porcelain and crockery. Potters and earthen pipe and bowl makers. Brick and tile makers. Mica workers. Others (mosaic, talc, alaba-ter, etc., workers).</p> <p>ORDER 11.—CHEMICAL PRODUCTS PROPERLY SO CALLED AND ANALOGOUS.</p> <p>Manufacture of matches and explosive materials. Manufacture of aerated and mineral waters and ice. Manufacture of dyes, paint and ink. Manufacture and refining of vegetable oils. Manufacture and refining of mineral oils. Manufacture of paper, cardboard and papier mache. Manufacture of lac. Others (soap, candles, cutch, perfumes or miscellaneous drugs).</p> <p>ORDER 12.—FOOD INDUSTRIES.</p> <p>Rice pounders and huskers and flour grinders. Bakers and bi-cuit makers. Grain parchers, etc. Butchers. Fish curers. Butter, cheese and phee makers. Makers of sugar, molasses and gur. Sweetmeat makers, preparers of jam and condiments, etc. Brewers and distillers. Toddy drawers. Manufacturers of tobacco, opium and ganja.</p> <p>ORDER 13.—INDUSTRIES OF DRESS AND THE TOILET.</p> <p>Hat, cap and turban makers. Tailors, milliners, dress makers, darners and embroiderers on linen. Shoe, boot and sandal makers. Other industries pertaining to dress, gloves, socks, garters, belts, buttons, umbrellas, canes, etc. Washing, cleaning and dyeing. Barbers, hairdressers and wig makers. Other industries connected with the toilet (bathrooms, shampoos, bath houses, etc.).</p> <p>ORDER 14.—FURNITURE INDUSTRIES.</p> <p>Cabinet makers, carriage painters, etc. Upholsterers, tent makers, etc.</p>	

Group No.	OCCUPATION.	Group No.	OCCUPATION.
1	2	1	2
Class B.—Preparation and Supply of Material Substances—continued.		Class B.—Preparation and Supply of Material Substances—concluded.	
<i>Sub-Class III.—INDUSTRY—concluded.</i>		<i>Sub-Class V.—TRADE—concluded.</i>	
ORDER 15.—BUILDING INDUSTRIES.		ORDER 26.—TRADE IN TEXTILES.	
85	Lime burners, cement workers.	123	Trade in piece-goods, wool, cotton, silk, hair and other textiles.
86	Excavators and well sinkers.	ORDER 27.—TRADE IN SKINS, LEATHER AND FURS.	
87	Stone cutters and dressers.	124	Trade in skins, leather, furs, feathers, horn and articles made from these.
88	Brick layers and masons.	ORDER 28.—TRADE IN WOOD.	
89	Builders of buildings not made of bamboo or similar material, painters, decorators of houses, tilers, plumbers, etc.	125	Trade in wood (not firewood), cork, bark, bamboo, thatch and articles made from these.
ORDER 16.—CONSTRUCTION OF MEANS OF TRANSPORT.		ORDER 29.—TRADE IN METALS.	
90	Persons engaged in making, assembling or repairing motor vehicles or cycles.	126	Trade in metals, machinery, knives, tools, etc.
91	Carriage, cart, palki, etc., makers and wheel-wrights.	ORDER 30.—TRADE IN POTTERY, BRICKS AND TILES.	
92	Ship, boat, aeroplane builders.	127	Trade in pottery, bricks and tiles.
ORDER 17.—PRODUCTION AND TRANSMISSION OF PHYSICAL FORCES (HEAT, LIGHT, ELECTRICITY, MOTIVE POWER, ETC.).		ORDER 31.—TRADE IN CHEMICAL PRODUCTS.	
93	Gas works and electric light and power.	128	Trade in chemical products (drugs, dyes, paints, petroleum, explosives, etc.).
ORDER 18.—OTHER MISCELLANEOUS AND UNDEFINED INDUSTRIES.		ORDER 32.—HOTELS, CAFES, RESTAURANTS, ETC.	
94	Printers, lithographers, engravers, etc.	129	Vendors of wine, liquors, aerated waters and ice.
95	Bookbinders and stitchers, envelope makers, etc.	130	Owners and managers of hotels, cookshops, sarais, etc., and their employes.
96	Makers of musical instruments.	ORDER 33.—OTHER TRADE IN FOOD-STUFFS.	
97	Makers of watches and clocks and optical, photographic, mathematical and surgical instruments.	131	Fish dealers.
98	Workers in precious stones and metals, enamellers, imitation jewellery makers, gilders, etc.	132	Grocers and sellers of vegetable oil, salt and other condiments.
99	Makers of rosaries, bead and other necklaces, bangles, spangles, lingams and sacred threads.	133	Sellers of milk, butter, ghee, poultry, eggs, etc.
100	Toy, kite, cage, fishing tackle, etc., makers, taxidermists, etc.	134	Sellers of sweetmeats, sugar, gur and molasses.
101	Others, including managers, persons (other than performers) employed in theatres and other places of public entertainment, employes of public societies, race course service, huntsmen, etc.	135	Cardamom, betel-leaf, vegetables, fruit and areca nut sellers.
102	Contractors for the disposal of refuse, dust, etc.	136	Grain and pulse dealers.
103	Sweepers, scavengers, etc.	137	Tobacco, opium, ganja, etc., sellers.
<i>Sub-Class IV.—TRANSPORT.</i>		138	Dealers in sheep, goats and pigs.
ORDER 19.—TRANSPORT BY AIR.		139	Dealers in hay, grass and fodder.
104	Persons concerned with aerodromes and aeroplanes.	ORDER 34.—TRADE IN CLOTHING AND TOILET ARTICLES.	
ORDER 20.—TRANSPORT BY WATER.		140	Trade in ready-made clothing and other articles of dress and the toilet (hats, umbrellas, socks, ready-made shoes, perfumes, etc.).
105	Persons (other than labourers) employed in harbours and docks including pilots.	ORDER 35.—TRADE IN FURNITURE.	
106	Labourers in harbours and docks.	141	Trade in furniture, carpets, curtains and bedding.
107	Ship owners and their employes, ship brokers, ships officers, engineers, mariners and firemen.	142	Hardware, cooking utensils, porcelain, crockery, glassware, bottles, articles for gardening, etc.
108	Persons (other than labourers) employed on the maintenance of harbours, docks, streams, rivers and canals (including construction).	ORDER 36.—TRADE IN BUILDING MATERIALS.	
109	Labourers employed on the construction and maintenance of harbours, docks, streams, rivers and canals.	143	Trade in building materials other than bricks, tiles, and woody materials.
110	Boat owners, boatmen and tow men.	ORDER 37.—TRADE IN MEANS OF TRANSPORT.	
ORDER 21.—TRANSPORT BY ROAD.		144	Dealers and hirers of mechanical transport, motors, cycles, etc.
111	Persons (other than labourers) employed on the construction and maintenance of roads and bridges.	145	Dealers and hirers of other carriages, carts, boats, etc.
112	Labourers employed on roads and bridges.	146	Dealers and hirers of elephants, camels, horses, cattle, asses, mules, etc.
113	Owners, managers and employes (excluding personal servants) connected with mechanically driven vehicles (including trams).	ORDER 38.—TRADE IN FUEL.	
114	Ditto connected with other vehicles.	147	Dealers in firewood, charcoal, coal, cowdung, etc.
115	Palki, etc., bearers and owners.	ORDER 39.—TRADE IN ARTICLES OF LUXURY AND THOSE PERTAINING TO LETTERS AND THE ARTS AND SCIENCES.	
116	Pack elephant, camel, mule, ass and bullock owners and drivers.	148	Dealers in precious stones, jewellery (real and imitation), clocks, optical instruments, etc.
117	Porters and messengers.	149	Dealers in common bangles, bead necklaces, fans, small articles, toys, hunting and fishing tackle, flowers, etc.
ORDER 22.—TRANSPORT BY RAIL.		150	Publishers, booksellers, stationers, dealers in music, pictures, musical instruments and curiosities.
118	Railway employes of all kinds other than coolies.	ORDER 40.—TRADE OF OTHER SORTS.	
119	Labourers employed on railway construction and maintenance and coolies and porters employed on railway premises.	151	Dealers in rag, stable refuse, etc.
ORDER 23.—POST OFFICE, TELEGRAPH AND TELEPHONE SERVICES.		152	General store-keepers and shop-keepers otherwise unspecified.
120	Post office, telegraph and telephone services.	153	Itinerant traders, pedlars, hawkers, etc.
<i>Sub-Class V.—TRADE.</i>		154	Other trades (including farmers of pounds, tolls and markets.)
ORDER 24.—BANKS, ESTABLISHMENTS OF CREDIT, EXCHANGES AND INSURANCE.			
121	Bank Managers, money-lenders, exchange and insurance agents, money changers and brokers and their employes.		
ORDER 25.—BROKERAGE, COMMISSION AND EXPORT.			
122	Brokers, commission agents, commercial travellers, warehouse owners and employes.		

Group No.	OCCUPATION	Group No.	OCCUPATION.
1	2	1	2
	Class C.—Public Administration and Liberal Arts.		Class D.—Miscellaneous.
	<i>Sub-Class VI.—PUBLIC FORCE.</i>		<i>Sub-Class IX.—PERSONS LIVING ON THEIR INCOME.</i>
	ORDER 41.—ARMY.		ORDER 51.—PERSONS LIVING PRINCIPALLY ON THEIR INCOME.
155	Army (Imperial).		
156	Army (Indian States).	150	Proprietors (other than of agricultural land), fund and scholarship holders and pensioners.
	ORDER 42.—NAVY.		
157	Navy.		
	ORDER 43.—AIR FORCE.		
158	Air force.		
	ORDER 44.—POLICE.		<i>Sub-Class X.—DOMESTIC SERVICE.</i>
159	Police.		ORDER 52.—DOMESTIC SERVICE.
160	Village watchmen.		
	<i>Sub-Class VII.—PUBLIC ADMINISTRATION.</i>	181	Cooks, water carriers, door-keepers, watchmen and other indoor servants.
	ORDER 45.—PUBLIC ADMINISTRATION.	182	Private grooms, coachmen, dog-boys, etc.
161	Service of the State.	183	Private motor drivers and cleaners.
162	Service of Indian and Foreign States.		
163	Municipal and other local (not village) service.		<i>Sub-Class XI.—INSUFFICIENTLY DESCRIBED OCCUPATIONS.</i>
164	Village officials and servants other than watchmen.		ORDER 53.—GENERAL TERMS WHICH DO NOT INDICATE A DEFINITE OCCUPATION.
	<i>Sub-Class VIII.—PROFESSIONS AND LIBERAL ARTS.</i>		
	ORDER 46.—RELIGION.	184	Manufacturers, business men and contractors otherwise unspecified.
165	Priests, ministers, etc.	185	Cashiers, accountants, book-keepers, clerks and other employes in unspecified offices, warehouses and shops.
166	Religious mendicants, inmates of monasteries, etc.	186	Mechanics otherwise unspecified.
167	Catechists, readers, church and mission service.	187	Labourers and workmen otherwise unspecified.
168	Temple, burial or burning ground service, pilgrim conductors, circumcisers.		
	ORDER 47.—LAW.		<i>Sub-Class XII.—UNPRODUCTIVE.</i>
169	Lawyers of all kinds, including karis, law agents and mukhtiyars.		ORDER 54.—INMATES OF JAILS, ASYLUMS AND ALMS-HOUSES.
170	Lawyers' clerks, petition writers, etc.	188	Inmates of jails, asylums and almshouses.
	ORDER 48.—MEDICINE.		
171	Medical practitioners of all kinds, including dentists, oculists and veterinary surgeons.		ORDER 55.—BEGGARS, VAGRANTS, PROSTITUTES.
172	Midwives, vaccinators, compounders, nurses, masseurs, etc.	189	Beggars, vagrants, witches, wizards, etc.
	ORDER 49.—INSTRUCTION.	190	Procurers and prostitutes.
173	Professors and teachers of all kinds.		
174	Clerks and servants connected with education.		ORDER 56.—OTHER UNCLASSIFIED NON-PRODUCTIVE INDUSTRIES.
	ORDER 50.—LETTERS AND ARTS AND SCIENCES.	191	Other unclassified non-productive industries.
175	Public scribes, stenographers, etc.		
176	Architects, surveyors, engineers and their employes.		
177	Authors, editors, journalists, artists, photographers, sculptors, astronomers, meteorologists, botanists, astrologers, etc.		
178	Music composers and masters, players on all kinds of musical instruments (not military), singers, actors, and dancers.		
179	Conjurors, acrobats, fortune-tellers, reciters, exhibitors of curiosities and wild animals.		

SUBSIDIARY TABLE I.—GENERAL DISTRIBUTION BY OCCUPATION.

CLASS, SUB-CLASS AND ORDER.	NUMBER PER 10,000 OF TOTAL POPULATION.		PERCENTAGE IN EACH CLASS, SUB-CLASS AND ORDER.		CLASS, SUB-CLASS AND ORDER.	NUMBER PER 10,000 OF TOTAL POPULATION.		PERCENTAGE IN EACH CLASS, SUB-CLASS AND ORDER.	
	Persons supported.	Actual workers.	Actual workers.	Dependents.		Persons supported.	Actual workers.	Actual workers.	Dependents.
1	2	3	4	5	1	2	3	4	5
BIHAR AND ORISSA	10,000	4,941	49	51	V—Trade	382	205	54	46
A.—PRODUCTION OF RAW MATERIALS	8,193	3,969	48	52	21. Banks, establishments of credit, exchange and insurance.	11	4	29	61
I—Exploitation of animals and vegetation.	8,140	3,931	48	52	25. Brokerage, commission and export ...	1	1	42	58
1. Pasture and agriculture	8,107	3,914	48	52	26. Trade in textiles	15	6	39	61
(a) Ordinary cultivation	7,966	3,802	48	52	27. Trade in skins, leather and furs ...	2	1	40	60
(b) Growers of special products and market gardening.	8	4	48	52	28. Trade in wood	6	4	63	37
(c) Forestry	7	4	62	38	29. Trade in metals	1	1	49	51
(d) Raising of farm stock	126	104	82	18	30. Trade in pottery	3	2	63	37
(e) Raising of small animals	0.17	0.09	52	48	31. Trade in chemical products ...	2	1	46	54
2. Fishing and hunting	33	17	52	48	32. Hotels, cafes, restaurants, etc. ...	15	7	45	55
II—Exploitation of minerals ...	54	38	70	30	33. Other trade in food-stuffs ...	219	125	57	43
3. Mines	42	30	71	29	34. Trade in clothing and toilet articles ...	3	1	46	54
4. Quarries of hard rocks	5	4	75	25	35. Trade in furniture	2	1	43	57
5. Salt, etc.	7	4	87	13	36. Trade in building materials ...	1	32	54	46
B.—PREPARATION AND SUPPLY OF MATERIAL SUBSTANCES.	1,120	601	54	46	37. Trade in means of transport ...	2	1	41	59
III—Industry	663	360	54	46	38. Trade in fuel	20	14	78	22
6. Textiles	127	68	54	46	39. Trade in articles of luxury and those pertaining to letters and the arts and sciences.	9	4	53	47
7. Hides, skins and hard materials from the animal kingdom.	5	3	50	50	40. Trade of other sorts	70	32	46	54
8. Wood	72	40	55	45	C.—PUBLIC ADMINISTRATION AND LIBERAL ARTS.	140	60	43	57
9. Metals	55	28	47	53	VI—Public force	28	11	40	60
10. Ceramics	57	33	58	42	41. Army	0.47	0.37	78	22
11. Chemical products properly so-called and analogous.	38	22	59	41	42. Navy ... ..	...	...	...	...
12. Food industries	102	65	64	36	43. Air force ... ..	...	...	...	...
13. Industries of dress and the toilet ...	131	74	53	47	44. Police	28	11	39	61
14. Furniture industries	0.19	0.10	54	46	VII—Public administration (order 45)	25	10	40	60
15. Building industries	18	9	49	51	VIII—Professions and liberal arts ...	87	39	44	56
16. Construction of means of transport ...	0.12	0.07	64	36	46. Religion	15	18	43	57
17. Production and transmission of physical forces (heat, light, electricity, motive power, etc.).	0.18	0.10	56	44	47. Law	6	2	27	73
18. Other miscellaneous and undefined industries.	48	20	43	57	48. Medicine	11	6	58	42
IV—Transport	75	36	48	52	49. Instruction	13	6	49	51
19. Transport by air ... ..	...	...	...	...	50. Letters and arts and sciences ...	12	6	46	54
20. Transport by water	8	3	41	59	D.—MISCELLANEOUS	546	311	57	43
21. Transport by road	41	22	53	47	IX—Persons living on their income (order 51.)	2	1	27	73
22. Transport by rail	23	10	44	56	X—Domestic services (order 52) ...	151	81	54	46
23. Post office, telegraph and telephone service	3	1	28	72	XI—Insufficiently described occupations (order 53.)	348	200	58	42
					XII—Unproductive	45	29	66	34
					54. Inmates of jails, asylums and almshouses	3	2	86	14
					55. Beggars, vagrants, prostitutes ...	42	27	65	35
					56. Other unclassified non-productive industries.	-0.2	-0.1	40	61

SUBSIDIARY TABLE II.—DISTRIBUTION BY OCCUPATION IN NATURAL DIVISIONS.

OCCUPATION.	NUMBER PER MILL OF TOTAL POPULATION SUPPORTED IN—				
	Bihar and Orissa.	North Bihar.	South Bihar.	Orissa.	Chota Nagpur Plateau.
1	2	3	4	5	6
TOTAL	1,000	1,000	1,000	1,000	1,000
I.—EXPLOITATION OF ANIMALS AND VEGETATION ...	814	881	738	719	823
II.—EXPLOITATION OF MINERALS	5	3	1	0.01	15
III.—INDUSTRY	68	39	91	115	67
IV.—TRANSPORT	8	4	14	7	8
V.—TRADE	32	31	54	65	28
VI.—PUBLIC FORCE	3	2	2	5	4
VII.—ADMINISTRATION	3	1	4	4	3
VIII.—PROFESSIONS AND LIBERAL ARTS	9	4	14	32	6
IX.—PERSONS LIVING ON THEIR INCOME	0.2	0.3	0.1	0.4	0.2
X.—SERVICE	15	8	41	17	7
XI.—INSUFFICIENTLY DESCRIBED OCCUPATIONS ...	35	25	49	38	36
XII.—UNPRODUCTIVE	4	3	4	10	4

SUBSIDIARY TABLE III.—DISTRIBUTION OF THE AGRICULTURAL, INDUSTRIAL, COMMERCIAL, PROFESSIONAL AND OTHER POPULATION IN NATURAL DIVISIONS AND DISTRICTS.

DISTRICTS AND NATURAL DIVISIONS.	AGRICULTURE.				INDUSTRY.				COMMERCE.				PROFESSIONS.				OTHERS.			
	Population supported by agriculture	Proportion of agricultural population per 1,000 of population.	PERCENTAGE ON AGRICULTURAL POPULATION OF—		Population supported by industry.	Proportion of industrial population per 1,000 of population.	PERCENTAGE ON INDUSTRIAL POPULATION OF—		Population supported by commerce.	Proportion of commercial population per 1,000 of population.	PERCENTAGE ON COMMERCIAL POPULATION OF—		Population supported by professions.	Proportion of professional population per 1,000 of population.	PERCENTAGE ON PROFESSIONAL POPULATION OF—		Population supported by others.	Proportion of other population per 1,000 of population.	PERCENTAGE ON OTHER POPULATION OF—	
			Actual work. rs.	Depend- ants.			Actual work. rs.	Depend- ants.			Actual work. rs.	Depend- ants.			Actual work. rs.	Depend- ants.				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
BIHAR AND ORISSA	30,371,295	797	43	53	3,723,902	69	55	45	1,733,959	43	53	47	399,358	9	44	56	2,904,414	77	60	40
NORTH BIHAR	12,232,370	373	45	55	564,917	40	59	48	481,303	34	59	48	62,577	5	59	48	676,519	48	50	41
Barran ...	2,107,983	901	49	61	105,360	45	64	46	66,104	28	63	48	10,004	1	45	55	60,232	23	56	44
Champan ...	1,796,130	920	51	63	48,083	36	67	43	43,012	33	67	43	3,680	2	60	40	58,229	30	60	40
Maner ...	2,408,039	907	50	61	100,083	40	48	46	73,372	37	61	50	11,321	3	51	49	57,016	31	50	50
Darbhanga ...	2,682,327	894	53	65	123,017	53	48	48	90,206	34	50	50	18,430	6	51	49	89,001	58	53	47
Bagalpur ...	1,753,098	867	54	66	88,031	44	55	45	103,706	61	53	48	10,243	6	51	49	82,749	34	68	32
Purnea ...	1,603,867	743	39	61	67,073	43	53	47	93,181	47	53	48	5,603	3	61	39	382,306	161	66	34
SOUTH BIHAR	5,438,063	776	49	61	695,109	99	71	49	315,996	68	49	61	105,713	14	45	55	899,032	110	57	43
Patna ...	1,134,550	714	50	60	159,013	10	49	61	131,020	72	47	53	39,497	10	43	57	140,231	100	55	45
Gaya ...	1,432,080	606	51	61	204,300	80	60	60	131,705	67	49	51	36,010	14	44	56	203,047	160	53	47
Bh. Bahad ...	1,367,860	747	51	63	200,411	114	63	47	114,597	63	61	40	22,561	13	43	57	111,000	104	59	41
Monghyr ...	1,013,368	745	48	63	120,060	62	63	48	166,074	78	46	63	23,372	11	47	53	309,306	104	57	43
ORISSA	2,756,808	600	33	67	400,927	115	53	47	287,907	72	53	47	87,093	22	38	62	405,408	101	50	50
Cuttack ...	1,370,574	604	32	68	277,707	134	61	40	140,070	71	60	60	44,616	23	37	63	253,993	100	44	56
Bahore ...	764,644	653	33	67	68,063	70	64	40	68,067	64	60	60	11,072	11	45	55	80,139	86	54	46
Puri ...	681,780	653	33	67	113,868	120	65	46	67,131	93	60	60	31,606	11	33	67	97,377	103	62	38
CHOTANAGPUR PLATEAU	9,808,094	797	64	40	1,002,259	81	69	38	449,393	36	67	43	73,076	6	45	55	393,452	80	67	33
Hazaribagh ...	1,100,741	880	62	38	70,438	63	69	38	33,578	32	45	55	6,156	4	39	61	18,270	33	67	33
Ilahchi ...	1,174,580	710	63	37	74,335	64	60	38	35,531	10	60	40	7,497	6	31	69	125,097	43	67	33
Palamanu ...	1,024,378	694	63	37	47,463	64	60	38	30,063	41	60	40	3,265	6	31	69	125,097	173	68	32
Manbhum ...	1,024,378	694	63	37	47,463	64	60	38	30,063	41	60	40	3,265	6	31	69	125,097	173	68	32
Singbhum ...	1,024,378	694	63	37	47,463	64	60	38	30,063	41	60	40	3,265	6	31	69	125,097	173	68	32
Santhal Parganas ...	1,024,378	694	63	37	47,463	64	60	38	30,063	41	60	40	3,265	6	31	69	125,097	173	68	32
Angul ...	1,024,378	694	63	37	47,463	64	60	38	30,063	41	60	40	3,265	6	31	69	125,097	173	68	32
Sehulpur ...	1,024,378	694	63	37	47,463	64	60	38	30,063	41	60	40	3,265	6	31	69	125,097	173	68	32
Chota Nagpur States	1,024,378	694	63	37	47,463	64	60	38	30,063	41	60	40	3,265	6	31	69	125,097	173	68	32

SUBSIDIARY TABLE IV.—OCCUPATIONS COMBINED WITH AGRICULTURE (WHERE AGRICULTURE IS THE SUBSIDIARY OCCUPATION).

OCCUPATION.	NUMBER PER MILLE WHO ARE AGRICULTURISTS IN—				
	Bihar and Orissa.	North Bihar.	South Bihar.	Orissa.	Chota Nagpur Plateau.
1	2	3	4	5	6
TOTAL	20	14	20	44	19
I.—EXPLOITATION OF ANIMALS AND VEGETATION	2	1	1	7	2
II.—EXPLOITATION OF MINERALS	96	319	83	...	73
III.—INDUSTRY	124	137	94	124	133
IV.—TRANSPORT	96	95	98	98	94
V.—TRADE	92	115	70	97	86
VI.—PUBLIC FORCE	244	147	181	304	300
VII.—PUBLIC ADMINISTRATION	123	144	108	111	135
VIII.—PROFESSIONS AND LIBERAL ARTS	206	206	185	246	196
IX.—PERSONS LIVING ON THEIR INCOME	102	73	51	181	112
X.—DOMESTIC SERVICE	51	70	43	63	49
XI.—INSUFFICIENTLY DESCRIBED OCCUPATIONS	19	11	11	50	38
XII.—UNPRODUCTIVE	31	51	15	30	24

SUBSIDIARY TABLE V.—OCCUPATIONS COMBINED WITH AGRICULTURE (WHERE AGRICULTURE IS THE PRINCIPAL OCCUPATION.)

LANDLORDS (RENT RECEIVERS.)		CULTIVATORS (RENT PAYERS.)		FARM SERVANTS AND FIELD-LABOURERS.	
Subsidiary occupation.	Number per 10,000 who follow it.	Subsidiary occupation.	Number per 10,000 who follow it.	Subsidiary occupation.	Number per 10,000 who follow it.
1	2	3	4	5	6
TOTAL	4,684	TOTAL	1,766	TOTAL	529
Rent payers	3,738	Rent receivers	97	Rent receivers	7
Agricultural labourers	61	Agricultural labourers	415	Rent payers	147
Government employés of all kinds	63	General labourers	99	General labourers	88
Money lenders or grain dealers or both	179	Government employés of all kinds	14	Village watchmen	4
Other traders of all kinds	61	Money lenders or grain dealers or both	41	Cattle breeders and milkmen	20
Priests	95	Other traders of all kinds	104	Mill hands	3
Clerks of all kinds (not Government)	23	Fishermen and boatmen	33	Fishermen and boatmen	30
School masters	24	Cattle breeders and milkmen	186	Rice pounders	6
Lawyers	22	Village watchmen	19	Shopkeepers and pedlars	17
Estate agents and managers	35	Weavers	61	Oil pressers	5
Medical practitioners	15	Barbers	43	Weavers	11
Artisans	180	Oil pressers	51	Potters	4
Others	250	Washermen	36	Leather workers	21
		Potters	43	Washermen	10
		Blacksmiths and carpenters	51	Blacksmiths and carpenters	5
		Leather workers	15	Coal miners	3
		Coal miners	12	Mica miners	1
		Mica miners	8	Mica splitters ... ..	...
		Mica splitters	1	Lac rearers	2
		Lac rearers	10	Lac manufacturers	1
		Lac manufacturers	2	Quarrymen (of stone)	1
		Quarry men (of stone)	2	Sugar manufacturers	1
		Sugar manufacturers	2	Others	183
		Others	431		

SUBSIDIARY TABLE VI.—OCCUPATIONS OF FEMALES BY SUB-CLASSES, ORDERS AND SELECTED GROUPS.

Group No.	OCCUPATIONS.	NUMBER OF ACTUAL WORKERS.		Number of females per 1,000 males.	Group No.	OCCUPATIONS.	NUMBER OF ACTUAL WORKERS.		Number of females per 1,000 males.	
		Males.	Females.				Males.	Females.		
1	2	3	4	5	1	2	3	4	5	
	TOTAL	12,007,073	6,749,840	562		18.—OTHER MISCELLANEOUS AND UNDEFINED INDUSTRIES.	5,140	28,591	226	
	I.—Exploitation of Animals and Vegetation.	9,810,041	5,119,861	521	99	Makers of rosaries, bead and other necklaces, bangles, spangles, ligaments and sacred threads.	6,251	6,512	1,005	
	1.—PASTURE AND AGRICULTURE ...	9,762,119	5,066,497	522	103	Sweepers, scavengers, etc.	6,194	6,211	1,335	
1	Income from the rent of agricultural land ...	97,857	17,345	177		II.—Transport	110,483	25,407	230	
2	Ordinary cultivators	7,355,730	3,452,923	463		19.—TRANSPORT BY AIR	...	...	36
3	Farm servants	75,167	7,555	101		20.—TRANSPORT BY WATER	11,903	4,411	373	
4	Field labourers	1,690,088	1,537,449	904		21.—TRANSPORT BY ROAD	69,243	22,495	308	
6(ii)	Tea, coffee, cinchona and rubber plantations	115	141	1,224		112	Labourers employed on roads and bridges	21,767	21,017	908
7	Fruit, flower, vegetable, betel vine, arecanut, etc., growers.	9,681	4,425	457		22.—TRANSPORT BY RAIL	35,112	2,223	64	
9	Woodcutters, firewood, catechu, rubber, etc., collectors and charcoal burners.	5,735	8,627	1,504		23.—POST OFFICE, TELEGRAPH AND TELEPHONE SERVICES.	3,317	229	60	
11	Cattle and buffalo breeders and keepers	73,907	21,085	287		V.—Trade	396,893	381,388	961	
14	Herdsmen, shepherds, goatherds, etc.	259,141	30,226	119		24.—BANKS, ESTABLISHMENTS OF CREDIT, EXCHANGE AND INSURANCE.	13,663	2,629	185	
	2.—FISHING AND HUNTING ...	47,922	16,864	341		25.—BROKERAGE, COMMISSION AND EXPORT.	1,639	463	283	
17	Fishing	46,068	16,165	351		26.—TRADE IN TEXTILES	18,879	3,932	208	
	II.—Exploitation of Minerals ...	90,413	52,148	577		27.—TRADE IN SKINS, LEATHER AND FURS.	2,817	775	275	
	3.—MINES	73,812	40,618	549		28.—TRADE IN WOOD	5,188	8,636	1,714	
19	Coalmines	73,308	38,573	530		29.—TRADE IN METALS	2,075	763	377	
	4.—QUARRIES OF HARD ROCKS ...	8,787	4,390	492		30.—TRADE IN POTTERY, BRICKS AND TILES.	2,361	2,753	1,590	
22(i)	Mica	7,334	4,208	563		31.—TRADE IN CHEMICAL PRODUCTS.	2,625	1,229	469	
	5.—SALT	7,314	7,310	936		32.—HOTELS, CAFES, RESTAURANTS, ETC.	16,533	9,286	563	
24	Extraction of saltpetre, alum and other substances soluble in water.	7,514	7,310	936	129	Vendors of wine, liquors, aerated water and ice.	16,198	9,223	563	
	III.—Industry	742,197	625,563	843		33.—OTHER TRADE IN FOOD-STUFFS.	215,360	829,015	1,203	
	6.—TEXTILES	143,448	116,574	813	131	Fish dealers...	13,070	33,728	1,581	
25	Cotton ginning, cleaning and pressing	2,926	2,496	550	132	Grocers and sellers of vegetable oil, salt and other condiments.	47,544	43,054	899	
26	Cotton spinning	2,641	24,540	9,653	133	Sellers of milk, butter, ghee, poultry, eggs, etc.	35,624	77,066	2,139	
27	Cotton sizing and weaving	124,687	74,044	601	134	Sellers of sweetmeats, sugar, gur and molasses	10,563	3,919	361	
28	Rope, twine and string	1,806	6,715	4,151	135	Cardamom, betel-leaf, vegetables, fruit and arecanut sellers.	34,154	42,315	1,238	
29	Weaving of woollen blankets	4,806	2,492	519	136	Grain and pulse dealers	60,556	53,411	805	
32	Silk spinners	89	1,614	18,135	137	Tobacco, opium, ranja, etc., sellers	5,330	2,300	336	
34	Silk weavers	2,419	1,187	473	139	Dealers in hay, grass and fodder	504	1,168	2,323	
36		5,085	1,667	206		34.—TRADE IN CLOTHING AND TOILET ARTICLES.	3,990	1,600	404	
	7.—HIDES, SKINS AND HARD MATERIALS FROM THE ANIMAL KINGDOM.					35.—TRADE IN FURNITURE	2,229	1,614	679	
	8.—WOOD	84,959	65,156	767		36.—TRADE IN BUILDING MATERIALS	429	739	169	
45	Basket makers and other industries of woody material, including leaves and thatchers and builders working with bamboo, reeds or similar materials.	41,753	61,476	1,473		37.—TRADE IN MEANS OF TRANSPORT.	2,605	223	87	
	9.—METALS	72,995	24,436	335		38.—TRADE IN FUEL	9,909	45,129	4,606	
46	Other workers in iron and makers of implements and tools principally or exclusively of iron.	50,374	16,523	334		39.—TRADE IN ARTICLES OF LUXURY AND THOSE PERTAINING TO LETTERS AND THE ARTS AND SCIENCES.	9,727	7,630	794	
49	Workers in brass, copper and bell metal	16,036	3,228	215	149	Dealers in common bangles, bead necklaces, fans, small articles, toys, hunting and fishing tackle, flowers, etc.	8,061	7,361	903	
	10.—CERAMICS	73,089	59,237	715	152	40.—TRADE OF OTHER SORTS	87,220	33,969	389	
53	Makers of glass, bangles, glass beads, necklaces and glass ear-studs, etc.	243	246	1,012		General storekeepers and shopkeepers otherwise unspecified.	76,126	30,670	406	
55	Potters and earthen pipe and bowl makers	66,871	40,542	741		VII.—Public Force	43,115	3	0.1	
56	Brick and tile makers	3,827	1,038	271		41.—ARMY	1,405	3	1	
57(i)	Mica workers	1,950	1,276	654		42.—NAVY	...	...	...
	11.—CHEMICAL PRODUCTS PROPERLY SO CALLED AND ANALOGOUS.	41,288	42,065	1,044		43.—AIR FORCE	...	...	...
61	Manufacture and refining of vegetable oils	37,975	40,761	1,073		44.—POLICE	41,710	...	...
64(i)	Manufacture of lac	3,037	2,210	725		VIII.—(Order 45) Public Administration.	33,996	3,615	106	
	12.—FOOD INDUSTRIES	64,429	181,397	2,813		VIII.—Professions and Liberal Arts.	115,621	30,902	267	
65	Rice pounders and huskers and flour grinders	4,754	92,730	19,506		46.—RELIGION	61,238	8,834	145	
67	Grain parchers, etc.	30,963	81,910	2,645		47.—LAW	5,797	...	...
68	Butchers	3,733	1,643	442		48.—MEDICINE	7,323	17,240	2,341	
72	Sweetmeat makers, preparers of jam and condiments, etc.	8,579	3,695	454		Midwives, vaccinators, compounders, nurses, masseurs, etc.	1,202	16,772	13,563	
	13.—INDUSTRIES OF DRESS AND THE TOILET.	170,921	111,715	654		49.—INSTRUCTION	23,694	1,429	62	
77	Tailors, milliners, dress makers, darters and embroiderers on linen.	30,536	13,534	650		50.—LETTERS AND ARTS AND SCIENCES.	16,129	6,849	126	
80	Washing, cleaning and dyeing	59,942	64,372	1,130		IX.—(Order 51) Persons living on their income.	1,454	338	539	
81	Barbers, hair dressers and wig makers	69,686	37,273	392		X.—(Order 52) Domestic Services ...	184,012	123,642	672	
	14.—FURNITURE INDUSTRIES ...	338	46	128	151	Cooks, water-carriers, doorkeepers, watchmen, and other indoor servants.	171,413	122,133	712	
	15.—BUILDING INDUSTRIES ...	23,644	10,149	429		XI.—Insufficiently described occupations.	413,056	347,473	841	
85	Lime burners, cement workers	2,080	3,678	1,767		53.—GENERAL TERMS WHICH DO NOT INDICATE A DEFINITE OCCUPATION.	413,056	347,473	841	
86	Excavators and well-sinkers	3,144	2,463	790	157	Labourers and workmen otherwise unspecified.	369,715	341,596	924	
	16.—CONSTRUCTION OF MEANS OF TRANSPORT.	281	39	149		XII.—Unproductive	65,860	46,001	698	
	17.—PRODUCTION AND TRANSMISSION OF PHYSICAL FORCES (HEAT, LIGHT, ELECTRICITY, MOTIVE POWER, ETC.).	378	10	26		54.—INMATES OF JAILS, ASYLUMS AND ALMSHOUSES.	7,468	724	97	
						55.—BEGGARS, VAGRANTS, PROSTITUTES.	53,074	45,205	712	
					180	Beggars, vagrants, witches, wizards, etc.	57,964	43,151	744	
						56.—OTHER UNCLASSIFIED NON-PRODUCTIVE INDUSTRIES.	518	79	248	

SUBSIDIARY TABLE VII.—SELECTED OCCUPATIONS, 1911 AND 1921.

Group No.	OCCUPATIONS.	Population supported in 1921.	Population supported in 1911.	Percentage of variation (1911-1921.)	Group No.	OCCUPATIONS.	Population supported in 1921.	Population supported in 1911.	Percentage of variation (1911-1921.)
1	2	3	4	5	1	2	3	4	5
	A.—PRODUCTION OF RAW MATERIALS.	31,104,147	31,114,979	— 0'03		10.—CERAMICS ...	217,969	261,425	— 3
	I.—EXPLOITATION OF ANIMALS AND VEGETATION.	30,900,104	30,851,083	— 0'2	55	Potters and earthen pipe and bowl makers.	204,750	208,631	— 2
	1.—PASTURE AND AGRICULTURE.	30,777,080	30,807,842	— 0'1		11.—CHEMICAL PRODUCTS PROPERLY SO CALLED, AND ANALOGOUS.	142,483	155,700	— 8
	(a) Ordinary cultivation ...	30,241,039	30,064,982	+ 1	61	Manufacture and refining of vegetable oils.	132,607	135,810	— 2
1	Income from rent of agricultural land	343,347	330,736	— 45	62	Manufacture and refining of mineral oils.			
2	Ordinary cultivators ...	34,075,411	21,908,850	+ 9		12.—FOOD INDUSTRIES	385,914	434,699	— 11
3	Agents, managers of landed estates (not planters), clerks, rent collectors, etc.	105,557	177,896	+ 10	65	Rice pounders and huskers and flour millers.	130,098	160,171	— 24
4	Farm servants ...	143,443			67	Grain parchers, etc.	163,906	167,432	— 3
5	Field labourers ...	5,477,478	7,240,860	— 23	68	Butchers ...	13,098	15,270	— 14
	(b) Growers of special products and market gardening.	30,156	28,690	+ 6	72	Sweetmeat makers, preparers of jam and condiments, etc.	35,745	26,125	— 1
6(1)	Indigo growers ...	410			74	Toddy drawers ...	38,793	36,621	+ 46
6(4)	Tea, coffee, cinchona, and rubber plantations.	363	4,402	— 83		13.—INDUSTRIES OF DRESS AND THE TOILET.	626,949	689,803	— 9
	(c) Forestry ...	26,242	54,922	— 52	77	Tailors, milliners, dress makers, darners and embroiderers on linen.	68,440	61,296	— 4
9	Wood-cutters, fire-wood, catechu, rubber, etc., collectors and charcoal burners.	32,348	40,390	— 53	78	Shoe, boot and sandal makers	59,036	66,787	— 12
10	Lac collectors ...	751			80	Washing, cleaning and dyeing	202,155	210,848	— 4
	(d) Raising of farm stock ...	478,901	668,785	— 28	81	Barbers, hair dressers and wig makers	202,798	226,832	— 10
11	Cattle and buffalo breeders and keepers	133,943	214,683	— 38		14.—FURNITURE INDUSTRIES	744	721	+ 3
14	Herdsman, shepherds, goat herders, etc.	338,645	451,333	— 25		15.—BUILDING INDUSTRIES	68,873	138,564	— 51
	(e) Raising of small animals ...	682	563	+ 21	87	Stone cutters and dressers	6,887	57,094	— 17
	2.—FISHING AND HUNTING	123,054	143,241	— 14	88	Brick layers and masons	41,008		
17	Fishing ...	118,881	133,610	— 11		16.—CONSTRUCTION OF MEANS OF TRANSPORT.	470	1,074	— 73
18	Hunting ...	4,163	9,631	— 57		17.—PRODUCTION AND TRANSMISSION OF PHYSICAL FORCES (HEAT, LIGHT, ELECTRICITY, MOTIVE POWER, ETC.)	683	307	+ 122
	II.—EXPLOITATION OF MINERALS.	204,043	163,896	+ 24		18.—OTHER MISCELLANEOUS AND UNDEFINED INDUSTRIES.	181,869	188,874	— 1
	3.—MINES	160,145	131,095	+ 22	98	Workers in precious stones and metals, enamellers, imitation jewellery makers, gliders, etc.	127,439	131,338	— 3
19	Coal mines ...	167,374	137,032	+ 24	99	Makers of rosaries, bead and other necklaces, bangles, spangles, lingams and sacred threads.	23,080	43,794	— 47
20	Petroleum wells ...				103	Sweepers, scavengers, etc.	25,886	45,402	— 43
	4.—QUARRIES OF HARD ROCKS	17,400	3,816	+ 366		IV.—TRANSPORT	284,144	361,049	— 21
22(1)	Mica ...	15,403	3,816	+ 356		20.—TRANSPORT BY WATER	30,011	63,036	— 42
22(4)	Other minerals (jade, diamonds, lime stone, etc.)	1,998			110	Boat owners, boatmen and tow men	25,623	40,652	— 37
	5.—SALT, ETC.	26,493	28,985	— 9		21.—TRANSPORT BY ROAD	156,707	215,383	— 27
	B.—PREPARATION AND SUPPLY OF MATERIAL SUBSTANCES.	4,262,818	4,807,680	— 12	112	Labourers employed on roads and bridges.	71,043	25,165	+ 182
	III.—INDUSTRY	2,618,829	2,796,442	— 10	118	Owners, managers, and employes (excluding personal servants) connected with mechanically driven vehicles (including trams).	114	76,227	— 48
	6.—TEXTILES	483,241	480,412	+ 1	114	Ditto connected with other vehicles	39,231		
25	Cotton ginning, cleaning and pressing	10,994	16,430	— 34	115	Palki, etc., bearers and owners	12,760	37,700	— 66
26	Cotton spinning	35,743	303,297	+ 6	116	Pack elephant, camel, mule, ass and bullock owners and drivers.	26,115	30,408	— 14
27	Cotton siring and weaving	385,063	1,155	— 1		22.—TRANSPORT BY RAIL	84,814	81,915	+ 4
31	Wool carding and spinning	1,155	15,851	— 1	118	Railway employes of all kinds other than coolies.	61,610	77,691	— 21
33	Weaving of woollen blankets	14,373	8,438	+ 4	119	Labourers employed on railway construction and maintenance and coolies and porters employed on railway premises.	22,204	4,322	+ 480
34	Silk spinners	2,430				23.—POST OFFICE, TELEGRAPH AND TELEPHONE SERVICES.	12,612	11,718	+ 8
35	Silk weavers	8,315				V.—TRADE	1,640,625	1,690,169	— 13
	7.—HIDES, SKINS AND HARD MATERIALS FROM THE ANIMAL KINGDOM.	19,871	3,201	+ 136		24.—BANKS, CREDIT, EXCHANGE AND INSURANCE.	41,389	57,866	— 29
39	Tanners, curriers, leather dressers and leather dyers, etc.	7,700	5,318	+ 33					
40	Makers of leather articles, such as trunks, water bags, saddlery or harness, etc., etc., excluding articles of dress.	11,148	1,646	+ 577					
	8.—WOOD	273,844	297,114	— 8					
43	Sawyers	6,082	125,363	— 8					
44	Carpenters, turners, and joiners, etc.	100,241	171,731	— 8					
45	Basket makers and other industries of woody material, including leaves and sheeters and builders working with bamboo, reeds and similar materials.	157,321							
	9.—METALS	207,443	208,499	— 0'5					
48	Other workers in iron and makers of implements and tools, principally or exclusively of iron.	143,168	144,230	— 1					
49	Workers in brass, copper and bell metal.	44,812	36,718	+ 22					

SUBSIDIARY TABLE VII.—SELECTED OCCUPATIONS, 1911 AND 1921—concluded.

Group No.	OCCUPATIONS.	Population supported in 1921.	Population supported in 1911.	Percentage of variation (1911-1921).	Group No.	OCCUPATIONS.	Population supported in 1921.	Population supported in 1911.	Percentage of variation (1911-1921).
1	2	3	4	5	1	2	3	4	5
	25.—BROKERAGE, COMMISSION AND EXPORT.	5,623	22,065	- 77		VII.—PUBLIC ADMINISTRATION.	54,124	66,969	+ 41
	26.—TRADE IN TEXTILES ...	57,915	132,721	- 56		25.—PUBLIC ADMINISTRATION	54,124	66,969	+ 41
	27.—TRADE IN SKINS, LEATHER AND FURS.	9,021	26,164	- 75	161	Secret of the State ...	7,211	14,028	+ 25
	28.—TRADE IN WOOD ...	22,164	37,267	- 40		VIII.—PROFESSIONS AND LIBERAL ARTS.	122,735	57,167	- 17
	29.—TRADE IN METALS ...	5,856	5,120	+ 16		31.—RELIGION ...	18,043	25,702	- 15
	30.—TRADE IN POTTERY ...	9,754	16,106	- 40	165	Preests, ministers, etc. ...	150,275	127,702	- 6
	31.—TRADE IN CHEMICAL PRODUCTS.	8,356	38,654	- 78	168	Temple burial or burning ground services, pilgrim conductors, circumcisers.	44,225	54,311	- 20
	32.—HOTELS, CAFES, RESTAURANTS, ETC.	66,783	89,666	- 36		47.—LAW ...	21,600	24,607	- 13
129	Vendors of wine, liquors, aerated waters and ice.	55,585	86,225	- 36	169	Lawyers of all kinds, including bailiffs, law agents and notaries.	14,070	14,450	- 10
	33.—OTHER TRADE IN FOOD STUFFS.	831,537	942,553	- 12		49.—MEDICINE ...	42,405	55,006	- 21
131	Fish dealers ...	75,050	96,143	- 22	171	Medical practitioners of all kinds including dentists, oculists, and veterinary surgeons.	19,345	18,521	+ 8
132	Grocers and sellers of vegetable oil, salt and other condiments.	165,643	310,444	- 45	172	Miswives, vaccinators, compounders, nurses, massagers, etc.	23,043	25,455	- 35
133	Sellers of milk, butter, ghee, poultry, eggs, etc.	172,403	59,011	+ 192		50.—INSTRUCTION ...	60,306	54,704	- 8
134	Sellers of sweetmeats, sugar, gur and molasses.	29,939	55,600	- 46	173	Professors and teachers of all kinds ...	42,802	54,754	- 8
135	Cardamom, betel-leaf, vegetables, fruit and arecanut sellers.	130,554	147,322	- 11	174	Clerks and servants connected with education.	1,803	54,754	- 8
136	Grain and pulse dealers ...	235,151	323,036	+ 5		51.—LETTERS AND ARTS AND SCIENCES.	46,199	56,038	- 28
	34.—TRADE IN CLOTHING AND TOILET ARTICLES.	12,288	12,741	- 11	178	Music composers and masters, players on all kinds of musical instruments (not military), singers, actors and dancers.	37,123	41,690	- 11
	35.—TRADE IN FURNITURE ...	5,703	15,809	- 45		D.—MISCELLANEOUS	2,072,518	1,870,142	+ 10
	36.—TRADE IN BUILDING MATERIALS.	2,270	5,271	- 67		IX.—PERSONS LIVING ON THEIR INCOME.	8,633	9,929	- 13
	37.—TRADE IN MEANS OF TRANSPORT.	6,787	7,823	- 13		51.—PERSONS LIVING PRINCIPALLY ON THEIR INCOME.	8,633	9,929	- 13
	38.—TRADE IN FUEL ...	76,805	109,238	- 31		X.—DOMESTIC SERVICE ...	574,079	736,148	- 21
	39.—TRADE IN ARTICLES OF LUXURY AND THOSE PERTAINING TO LETTERS AND THE ARTS AND SCIENCES.	28,489	47,702	- 39		52.—DOMESTIC SERVICE ...	574,079	736,148	- 21
149	Dealers in common bangles, bead necklaces, fans, small articles, toys, hunting and fishing tackle, flowers, etc.	27,327	30,733	- 31	181	Cooks, water carriers, door-keepers, watch-men and other indoor servants.	543,362	672,096	- 19
	40.—TRADE OF OTHER SORTS ...	264,916	88,482	+ 199	182	Private rooms, coachmen, dogboys, etc.	30,227	54,045	- 44
153	General store-keepers and shop-keepers otherwise unspecified.	229,545	79,953	+ 187		XI.—INSUFFICIENTLY DESCRIBED OCCUPATIONS.	1,319,947	942,369	+ 40
	C.—PUBLIC ADMINISTRATION AND LIBERAL ARTS.	532,576	642,512	- 16		53.—GENERAL TERMS WHICH DO NOT INDICATE A DEFINITE OCCUPATION.	1,319,947	942,369	+ 40
	VI.—PUBLIC FORCE	108,893	120,436	- 40	185	Cashiers, accountants, book-keepers, clerks and other employees in unspecified offices, ware-houses and shops.	76,152	40,156	+ 65
	41.—ARMY ...	1,816	1,365	+ 34	187	Labourers and workmen otherwise unspecified.	1,238,525	680,163	+ 36
	42.—NAVY ...	...	...	...		XII.—UNPRODUCTIVE ...	160,860	121,735	- 11
	43.—AIR FORCE ...	...	...	...		54.—INMATES OF JAILS, ASYLUMS AND ALMS HOUSES.	2,546	2,090	+ 5
	44.—POLICE ...	107,078	179,061	- 40		55.—BEGGARS, VAGRANTS, PROSTITUTES.	162,633	122,725	- 23
159	Police ...	26,827	43,443	- 38		56.—OTHER UNCLASSIFIED NON-PRODUCTIVE INDUSTRIES.	791	...	...
160	Village watchmen ...	80,251	135,639	- 41	189	Beggars, vagrants, witches, wizards, etc.	156,835	122,725	- 11
					190	Procurers and prostitutes ...	3,238	...	...
					191	Other unclassified non-productive industries.	791	...	...

SUBSIDIARY TABLE VIII.—OCCUPATIONS OF SELECTED CASTES.

CASTE AND OCCUPATIONS.	Number per 1,000 workers engaged in each occupation.	Number of female workers per 100 males.	CASTE AND OCCUPATIONS.	Number per 1,000 workers engaged in each occupation.	Number of female workers per 100 males.	CASTE AND OCCUPATIONS.	Number per 1,000 workers engaged in each occupation.	Number of female workers per 100 males.
1	2	3	1	2	3	1	2	3
ANGLO-INDIAN—			DHOBI (HINDU)—			GOALA—cont'd.		
WHOLE PROVINCE ...	1,000	13	WHOLE PROVINCE ...	1,000	75	Extraction of minerals ...	1	66
Agents and managers of landed estates, etc. ...	42	4	Washermen ...	539	110	Transport ...	4	3
Industries ...	112	3	Cultivators of all kinds ...	330	41	Trade ...	4	125
Transport ...	430	7	Field-labourers, wood-cutters, etc. ...	64	55	Domestic service ...	9	12
Public administration ...	57	137	Raisers of live-stock ...	11	7	Labourers unspecified ...	41	91
Arts and professions ...	53	30	Domestic service ...	5	15	Others ...	6	31
Living on their income ...	68	15	Labourers unspecified ...	28	69			
Contractors, clerks, etc. ...	118	26	Others ...	17	63	CHOTA NAGPUR PLATEAU ...	1,000	87
Others ...						Herdsmen and milkmen ...	119	63
						Cultivators of all kinds ...	780	65
						Field-labourers, wood-cutters, etc. ...	64	123
						Extraction of minerals ...	14	39
						Transport ...	6	24
						Trade ...	8	123
						Domestic service ...	6	61
						Labourers unspecified ...	41	111
						Others ...	14	21
BAHMAN (BHUMIHAR BRAHMAN)—			DHUNIYA—					
BIHAR ...	1,000	19	BIHAR ...	1,000	58			
Agriculture ...	946	11	Cotton cleaners ...	61	61			
Agents and managers of landed estates, etc. ...	6	4	Cultivators of all kinds ...	503	61			
Field labourers, wood cutters, etc. ...	9	7	Field-labourers, wood-cutters, etc. ...	249	74			
Trade ...	2	24	Trade ...	18	50			
Domestic service ...	18	4	Domestic service ...	36	24			
Labourers unspecified ...	8	54	Labourers unspecified ...	75	95			
Others ...	15	22	Others ...	61	40	HAJJAM (HINDU)—		
						BIHAR ...	1,000	67
BABHI—			DOSADH—			Barbers ...	395	43
BIHAR ...	1,000	40	BIHAR ...	1,000	67	Cultivators of all kinds ...	470	48
Carpenters ...	361	11	Labourers ...	554	84	Field-labourers, wood-cutters, etc. ...	65	101
Cultivators of all kinds ...	530	47	Cultivators of all kinds ...	341	54	Domestic service ...	18	93
Field-labourers, wood-cutters, etc. ...	87	117	Field-labourers, wood-cutters, etc. ...	40	97	Labourers unspecified ...	34	113
Trade ...	10	26	Raisers of live-stock ...	14	9	Others ...	18	54
Domestic service ...	21	17	Extraction of minerals ...	1	19			
Labourers unspecified ...	57	88	Transport ...	4	9			
Others ...	34	48	Trade ...	3	78	HAZARIBAGH ...	1,000	98
			Public force ...	3	2	Barbers ...	138	66
			Domestic service ...	28	8	Cultivators of all kinds ...	786	105
			Others ...	13	49	Field-labourers, wood-cutters, etc. ...	54	261
						Domestic service ...	5	29
						Labourers unspecified ...	5	61
						Others ...	42	38
ORISSA ...	1,000	11	CHOTA NAGPUR PLATEAU ...	1,000	92			
Carpenters ...	508	5	Labourers ...	300	112			
Cultivators of all kinds ...	357	6	Cultivators of all kinds ...	424	86			
Field-labourers, wood-cutters, etc. ...	35	8	Field-labourers, wood-cutters, etc. ...	139	134	JOLAHA—		
Trade ...	8	257	Raisers of live-stock ...	9	8	BIHAR ...	1,000	64
Domestic service ...	12	81	Extraction of minerals ...	63	47	Weavers ...	153	44
Labourers unspecified ...	35	83	Transport ...	19	90	Cultivators of all kinds ...	530	61
Others ...	54	115	Trade ...	8	88	Field-labourers, wood-cutters, etc. ...	184	119
			Public force ...	8	8	Extraction of minerals ...	9	92
			Domestic service ...	18	15	Industries ...	21	68
			Others ...	25	38	Trade ...	19	37
						Domestic service ...	45	39
						Labourers unspecified ...	49	137
						Others ...	25	40
HAZARIBAGH ...	1,000	100	EUROPEANS AND ALLIED RACES.					
Carpenters ...	80	23	WHOLE PROVINCE ...	1,000	14	CHOTA NAGPUR PLATEAU ...	1,000	74
Cultivators of all kinds ...	838	113	Agents and managers of landed estates, etc. ...	42	6	Weavers ...	224	51
Field-labourers, wood-cutters, etc. ...	44	234	Extraction of minerals ...	46	6	Cultivators of all kinds ...	567	83
Trade ...	2	371	Industries ...	68	3	Field-labourers, wood-cutters, etc. ...	49	179
Domestic service ...	5	112	Transport ...	154	4	Domestic service ...	33	63
Labourers unspecified ...	4	70	Public force ...	284	0.3	Industries ...	3	24
Others ...	32	31	Public administration ...	90	6	Trade ...	8	60
			Arts and professions ...	147	60	Domestic service ...	47	43
			Contractors, etc. ...	64	12	Labourers unspecified ...	27	108
			Others ...	87	111	Others ...	42	41
BRABMAN—			GAURA—					
WHOLE PROVINCE ...	1,000	14	ORISSA ...	1,000	42	KAMAR—		
Priests ...	108	14	Herdsmen and milkmen ...	437	79	SOUTH BIHAR ...	1,000	40
Income from rent of land ...	30	11	Cultivators of all kinds ...	373	9	Blacksmiths ...	409	13
Cultivators of all kinds ...	739	12	Field-labourers, wood-cutters, etc. ...	51	13	Cultivators of all kinds ...	376	65
Trade ...	11	33	Industries ...	25	540	Field-labourers, wood-cutters, etc. ...	83	243
Arts and professions ...	16	67	Transport ...	9	2	Domestic service ...	3	63
Domestic service ...	26	13	Trade ...	13	277	Raisers of live-stock ...	5	11
Beggars ...	17	45	Public administration ...	35	86	Labourers unspecified ...	60	138
Others ...	43	23	Domestic service ...	27	194	Others ...	66	28
			Labourers unspecified ...	29				
			Others ...	10		ORISSA ...	1,000	13
KAMAR—			CHOTA NAGPUR PLATEAU ...	1,000	68	Blacksmiths ...	413	6
WHOLE PROVINCE ...	1,000	86	Herdsmen and milkmen ...	170	53	Cultivators of all kinds ...	368	7
Herdsmen ...	92	61	Cultivators of all kinds ...	443	51	Field-labourers, wood-cutters, etc. ...	47	16
Cultivators of all kinds ...	363	73	Field-labourers, wood-cutters, etc. ...	238	32	Domestic service ...	16	18
Labourers, wood-cutters, etc. ...	352	108	Industries ...	14	440	Labourers unspecified ...	22	37
Raisers of live-stock ...	10	13	Transport ...	2	13	Others ...	108	67
Extraction of minerals ...	22	53	Trade ...	14	343			
Domestic service ...	8	708	Public administration ...	4	4	CHOTA NAGPUR PLATEAU ...	1,000	67
Domestic service ...	11	52	Domestic service ...	37	174	Blacksmiths ...	361	49
Labourers unspecified ...	129	116	Labourers unspecified ...	29	156	Cultivators of all kinds ...	368	70
Others ...	13	56	Others ...	10	4	Field-labourers, wood-cutters, etc. ...	104	163
						Domestic service ...	22	11
						Labourers unspecified ...	45	114
						Others ...	73	78
STATES	1,000	27	GOALA—					
Herdsman ...	853	13	BIHAR ...	1,000	54			
Field-labourers, wood-cutters, etc. ...	191	43	Herdsmen and milkmen ...	193	85			
Raisers of live-stock ...	40	1	Cultivators of all kinds ...	712	45			
Industries ...	38	1,618	Field-labourers, wood-cutters, etc. ...	31	79			
Trade ...	25	732						
Domestic service ...	27	65						
Labourers unspecified ...	10	135						
Others ...	12	23						

SUBSIDIARY TABLE VIII.—OCCUPATIONS OF SELECTED CASTES—concluded.

CASTES AND OCCUPATIONS.	Number per 1,000 workers engaged in each occupation.	Number of female workers per 100 males.	CASTES AND OCCUPATIONS.	Number per 1,000 workers engaged in each occupation.	Number of female workers per 100 males.	CASTES AND OCCUPATIONS.	Number per 1,000 workers engaged in each occupation.	Number of female workers per 100 males.
1	2	3	1	2	3	1	2	3
KANDU—			CHOTA NAGPUR PLATEAU—contd.			CHOTA NAGPUR PLATEAU	1,000	34
BIHAR	1,000	60	Transport	1	27	Agriculture and military service	700	35
Grain-parchers	154	164	Trade	3	48	Agents and managers of landed estates, etc.	10	19
Cultivators of all kinds	618	47	Domestic service	6	25	Field-labourers, wood-cutters, etc.	4	83
Field-labourers, wood-cutters, etc.	124	22	Labourers unspecified ... ..	...	...	Raisers of live-stock	11	14
Trade	76	51	KUMHAR—			Extraction of minerals	20	14
Domestic service	21	16	WHOLE PROVINCE	1,000	66	Industries	12	17
Labourers unspecified	69	61	Potters	114	78	Transport	11	5
Others	29	23	Cultivators of all kinds	341	32	Trade	22	59
			Field-labourers, wood-cutters, etc.	11	67	Public force	1	3
			Raisers of live-stock	21	8	Public administration	1	1
			Labourers unspecified	23	70	Arts and professions	2	6
			Others ... ..	...	...	Domestic service	13	54
						Labourers unspecified	27	43
						Others	8	34
KARAN—			KURMI—			TANTI—		
ORISSA	1,000	15	BIHAR	1,000	47	BIHAR	1,000	63
Writers	179	4	Cultivators	755	40	Writers	119	41
Income from rent of land	61	14	Income from rent of land	5	15	Cultivators of all kinds	174	49
Cultivators of all kinds	505	12	Field-labourers, wood-cutters, etc.	119	65	Field-labourers, wood-cutters, etc.	10	73
Field-labourers, wood-cutters, etc.	23	10	Raisers of live-stock	5	15	Raisers of live-stock	13	19
Industries	23	363	Trade	6	17	Industries	8	92
Trade	18	21	Domestic service	71	119	Trade	8	75
Public administration	20	1	Labourers unspecified	23	94	Domestic service	21	59
Arts and professions	30	37	Others	16	25	Labourers unspecified	146	117
Domestic service	43	2				Others	29	95
Others	56	37						
ORISSA STATES	1,000	11	CHOTA NAGPUR PLATEAU	1,000	72	ORISSA	1,000	48
Writers	151	1	Cultivators	805	72	Writers	505	41
Income from rent of land	4	3	Income from rent of land	63	15	Cultivators of all kinds	229	8
Cultivators of all kinds	479	10	Field-labourers, wood-cutters, etc.	82	142	Field-labourers, wood-cutters, etc.	43	23
Field-labourers, wood-cutters, etc.	47	39	Raisers of live-stock	48	24	Raisers of live-stock	16	15
Industries	24	159	Trade	3	45	Industries	25	444
Trade	27	53	Domestic service	5	25	Trade	17	157
Public administration	53	62	Labourers unspecified	21	107	Domestic service	19	115
Arts and professions	37	3	Others	24	40	Labourers unspecified	123	73
Domestic service	44	5				Others	34	252
Others	142	5						
KAYASTH—			MALLAH—			ORISSA STATES	1,000	36
BIHAR	1,000	11	BIHAR	1,000	59	Writers	518	59
Writers	318	3	Boatmen and fishermen	146	77	Cultivators of all kinds	221	11
Income from rent of land	73	22	Cultivators of all kinds	457	47	Field-labourers, wood-cutters, etc.	77	13
Cultivators of all kinds	619	15	Field-labourers, wood-cutters, etc.	268	74	Raisers of live-stock	20	6
Trade	11	18	Industries	6	133	Industries	24	260
Arts and professions	6	7	Trade	10	147	Trade	31	360
Persons living on their income	43	19	Domestic service	12	86	Domestic service	18	146
Others	76	15	Labourers unspecified	51	80	Labourers unspecified	10	127
			Others	17	41	Others	41	114
KEWAT—			NUNIYA—			TELI—		
WHOLE PROVINCE	1,000	68	BIHAR	1,000	71	WHOLE PROVINCE	1,000	53
Fishermen	431	142	Saltpetre refiners	144	74	Oil-pressers	255	103
Cultivators of all kinds	518	26	Cultivators of all kinds	501	17	Cultivators of all kinds	550	40
Field-labourers, wood-cutters, etc.	128	37	Field-labourers, wood-cutters, etc.	176	48	Field-labourers, wood-cutters, etc.	55	15
Raisers of live-stock	15	140	Trade	9	37	Raisers of live-stock	7	9
Industries	7	12	Domestic service	8	61	Extraction of minerals	4	508
Transport	20	128	Labourers unspecified	44	89	Industries	13	204
Trade	23	97	Others	23	65	Transport	10	5
Domestic service	31	68				Trade	66	32
Labourers unspecified	14	50				Domestic service	11	21
Others ... ..	...	...				Labourers unspecified	28	79
						Others	11	47
KOIRI—			RAJPUT—			DHOBI (MUHAMMADAN)—		
BIHAR	1,000	56	BIHAR	1,000	19	NORTH BIHAR	1,000	78
Cultivators and vegetable growers	591	53	Agriculture and military service	233	11	Washermen	294	18
Field-labourers, wood-cutters, etc.	59	102	Agents and managers of landed estates, etc.	5	4	Cultivators of all kinds	536	46
Raisers of live-stock	6	17	Field-labourers, wood-cutters, etc.	12	40	Field-labourers, wood-cutters, etc.	74	73
Extraction of minerals	1	15	Raisers of live-stock	2	7	Others	60	75
Industries	1	55	Extraction of minerals	0.4	8			
Transport	1	3	Industries	2	405			
Trade	4	176	Trade	6	20	HAJJAM (MUHAMMADAN)—		
Domestic service	6	30	Public force	4	1	NORTH BIHAR	1,000	56
Labourers unspecified	27	161	Public administration	2	1	Barbers	136	20
Others	5	25	Arts and professions	3	3	Cultivators of all kinds	673	59
			Domestic service	20	5	Field-labourers, wood-cutters, etc.	118	84
			Contractors	2	3	Domestic service	56	75
CHOTA NAGPUR PLATEAU	1,000	80	Labourers unspecified	6	41	Others	17	47
Cultivators and vegetable growers	854	58	Others	3	29			
Field-labourers, wood-cutters, etc.	60	136						
Raisers of live-stock	9	3						
Extraction of minerals	16	29						
Industries	8	8						

SUBSIDIARY TABLE IX.—NUMBER OF PERSONS EMPLOYED ON RAILWAYS AND IN THE IRRIGATION DEPARTMENT AND IN THE POST OFFICE AND TELEGRAPH DEPARTMENT ACCORDING TO THE DEPARTMENTAL RETURNS.

I.—RAILWAYS AND IRRIGATION DEPARTMENT.			II.—POST OFFICE AND TELEGRAPH DEPARTMENT.				
CLASS OF PERSONS EMPLOYED.	Europeans and Anglo-Indians.	Indians.	CLASS OF PERSONS EMPLOYED.	POST OFFICE.		TELEGRAPH DEPARTMENT.	
				Europeans and Anglo-Indians.	Indians.	Europeans and Anglo-Indians.	Indians.
1	2	3	1	2	3	4	5
RAILWAYS.			TOTAL PERSONS EMPLOYED ...	8	7,396	32	446
TOTAL PERSONS EMPLOYED ...	1,329	103,661	(1) Post and Telegraphs ...	8	6,470	32	446
Persons directly employed...	1,328	69,987	Supervising officers (including Probationary Superintendents and Inspectors of Post Offices and Assistant and Deputy Superintendents of Telegraphs and all officers of higher rank than these).	2	38	20	4
Officers ...	132	12	Postmasters, including Deputy Assistant, Sub and Branch Postmasters.	3	677	...	...
Subordinates drawing more than Rs. 75 per mensem.	1,022	1,064	Signalling establishment including warrant officers, non-commissioned officers, military telegraphists and other employes.	...	...	11	71
Subordinates drawing from Rs. 20 to Rs. 75 per mensem.	174	13,360	Miscellaneous agents, school masters, station masters, etc.	...	656	...	...
Subordinates drawing under Rs. 20 per mensem.	...	55,642	Clerks of all kinds ...	3	738	1	27
Persons indirectly employed ...	1	33,674	Postmen ...	...	1,761	...	...
Contractors ...	1	523	Skilled labour establishment including foremen, instrument makers, carpenters, blacksmiths, mechanics, sub-inspectors, linemen and line riders and other employes.	...	...	...	119
Contractors' regular employes	...	3,108	Unskilled labour establishment including line coolies, cable guards, battery-men, telegraph messengers, peons and other employes.	...	588	...	236
Coolies ...	...	30,043	Road establishment consisting of overseers, runners, clerks and book-keeping agents, boatmen, sycas, coolies, bearers and others.	...	2,014	...	...
IRRIGATION DEPARTMENT.			(2) Railway Mail Service ...	...	228	...	...
TOTAL PERSONS EMPLOYED ...	7	11,237	Supervising officers (including Superintendents and Inspectors of sorting).	...	6	...	...
Persons directly employed ...	6	3,277	Clerks of all kinds ...	...	8	...	...
Officers ...	5	18	Sorters ...	...	407	...	...
Upper Subordinates ...	1	43	Mail guards, mail agents, van peons, porters, etc.	...	249	...	...
Lower " ...	...	235	Messengers ...	...	94	...	...
Clerks ...	...	5	Other servants ...	...	162	...	...
Peons and other servants ...	...	2,260					
Coolies ...	...	596					
Persons indirectly employed ...	1	7,960					
Contractors ...	1	508					
Contractors, regular employes	...	1,533					
Coolies ...	...	5,025					

SUBSIDIARY TABLE X.—NUMBER OF LAC GROWERS AND NUMBER AND KIND OF TREES ON WHICH LAC IS GROWN.

DISTRICT AND NATURAL DIVISION.	Number of lac growers.	NUMBER AND KIND OF TREES.				
		Bair.	Kusum.	Palas.	Piral, Bur, Gular and Pakor.	Other trees.
BIHAR AND ORISSA ...	311,866	1,431,684	277,350	4,142,803	68,900	134,527
NORTH BIHAR ...	556	51,905	...	8,145	537	402
Champanan ...	13	3	...	...	15	...
Bhagalpur ...	37	1,025	...	8,145	...	...
Purnea ...	509	50,177	...	...	521	402
SOUTH BIHAR ...	9,438	2,442	...	686,142	475	2,540
Gaya ...	1,203	2,437	...	684,620	43	2,574
Shahabad ...	173	5	...	31,457	13	266
Monghyr ...	3	...	...	95	...	...
CHOTA NAGPUR PLATEAU ...	301,872	1,378,037	277,350	3,455,516	67,888	131,585
Hazaribagh ...	13,123	17,383	18,700	655,121	618	4,906
Ranchi ...	32,355	131,315	90,547	424,657	11,165	23,230
Palamanu ...	41,010	30,116	4,175	1,791,010	1,024	2,484
Manbhum ...	25,551	619,527	110,388	621,740	39,392	73,629
Singbhum ...	63,571	137,352	16,333	15,000	12,833	20,560
Santal Parganas ...	22,144	233,789	66	135,073	600	3,067
Angul ...	13	...	94	...	...	251
Sambalpur ...	110	1	257	...	175	...
Orissa States ...	14,039	27,009	24,356	1,730	1,769	160
Chota Nagpur States ...	13,713	62,557	3,850	1,650	438	201

DETAILS FOR FEUDATORY STATES.

Orissa States ...	16,039	27,009	24,256	1,730	1,769	160
Athmallik ...	5	12	25	13	...	...
Bamra ...	291	60	1,497	61	240	...
Bonsai ...	437	...	1,166	...	...	...
Dhenkanal ...	134	...	1,149	...	...	...
Gangpur ...	168	5	1,143	15	13	...
Kalahandi ...	670	21	8,300	...	11	6
Konjhar ...	1,590	609	2,740	251	1,194	59
Mayurbhanj ...	12,763	26,341	5,684	311	241	66
Nileiri ...	1	1	...	...	...	...
Pal Lahara ...	11	...	43	...	...	...
Patna ...	94	...	1,068	11	...	...
Rairakhol ...	9	...	37	...	...	...
Sonpur ...	2	...	...	1,068	...	...
Talcher ...	10	...	83	...	...	...
Chota Nagpur States ...	13,713	62,557	3,850	1,650	438	201
Sarnikela ...	2,500	40,434	767	537	259	10
Kharsawan ...	4,513	13,163	3,083	1,113	179	131

SUBSIDIARY TABLE XI.—NUMBER OF HANDLOOMS AT WORK.

DISTRICT OR STATE.	NUMBER OF HANDLOOMS WEAVING.					
	Cotton.	Silk.	Wool.	Cotton and silk.	Cotton and wool.	Silk and wool.
BIHAR AND ORISSA ...	156,757	2,336	2,470	2,627	340	12
NORTH BIHAR ...	18,606	181	670	1,805	16	5
Saran ...	3,090	...	73	11	...	...
Champanan ...	247	...	55	10	...	...
Muzaffarpur ...	3,345	...	312	2	...	...
Darbhanga ...	6,689	...	73	...	...	...
Bhagalpur ...	3,192	105	125	1,782	16	5
Purnea ...	2,034	16	23	...	...	...
SOUTH BIHAR ...	16,135	391	1,309	132	53	...
Patna ...	3,153	237	79	7	...	...
Gaya ...	7,304	163	683	119	48	...
Shahabad ...	2,705	3	409	...	...	...
Monghyr ...	2,993	...	41	6	5	...
ORISSA ...	20,921	347	14	181	3	...
Cuttack ...	12,376	244	11	131	3	...
Balasore ...	5,080	40	3	...	...	...
Puri ...	3,515	54	...	60	...	...
CHOTA NAGPUR PLATEAU ...	101,075	1,467	484	509	268	7
Hazaribagh ...	6,750	8	...	4	...	...
Ranchi ...	10,595	5	110	...	...	...
Palamanu ...	3,659	...	234	...	1	...
Manbhum ...	8,453	73	5	23	...	...
Singbhum ...	5,517	40	7	1	...	...
Santal Parganas ...	18,501	31	10	3	...	...
Angul ...	1,819	...	...	...	...	...
Sambalpur ...	11,076	150	...	363	11	...
Orissa States ...	82,280	1,152	4	112	256	7
Chota Nagpur States ...	824	4	84	...	...	...

DETAILS FOR FEUDATORY STATES.

Orissa States ...	32,380	1,152	4	112	256	7
Athgarh ...	77	...	...	...	...	...
Athmallik ...	380	1	...	...	...	...
Bamra ...	879	...	...	...	...	...
Baramba ...	209	...	...	2	...	...
Baud ...	1,076	13	...	...	...	...
Bonsai ...	300	...	...	...	...	...
Daspalla ...	199	...	...	...	...	...
Dhenkanal ...	1,310	13	...	69	...	...
Gangpur ...	2,943	1	...	...	...	...
Hindol ...	301	...	...	...	...	...
Kalahandi ...	4,439	23	...	...	...	...
Konjhar ...	2,491	185	...	...	...	...
Khandpara ...	297	...	...	10	...	...
Mayurbhanj ...	5,491	512	1	3	...	...
Nayagarh ...	706	30	...	...	...	...
Narsinghpur ...	176	...	...	...	...	...
Nileiri ...	278	...	...	...	...	...
Pal Lahara ...	223	...	...	3	...	...
Patna ...	5,937	...	...	...	...	...
Rairakhol ...	285	...	...	7	...	...
Sonpur ...	164	3	...	7	...	...
Sonpur ...	3,276	65	3	...	256	...
Talcher ...	461	9	...	13	...	...
Tigiria ...	437	294	...	...	...	...
Chota Nagpur States ...	824	4	84	...	...	...
Sarnikela ...	636	4	84	...	...	...
Kharsawan ...	198	...	...	...	...	...

SUBSIDIARY TABLE XII.—AGE, OCCUPATION AND PRINCIPAL BIRTH PLACES OF THE MOST NUMEROUS CASTES IN THE JHERRIA COALFIELD—continued.

CASTE.		PIT CARPENTERS AND PROFFERS.		OVERMEN.		CONTRACTORS.		SINDERS.		ENGINEERS AND FIREMEN.		MASONS.		TYNDALS AND CHARGEMEN.		BRICK MAKERS.		COOKS OF ALL KINDS.		FILLERS.		THROATMEN.		OTHERS.	
		Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Bauri	...	25	25	27	38	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Beldar	...	...	...	...	...	20	...	26	3	55	...	38	...	...	...	...	1	2,068	2,410	...	...	51	6	301	128
Budija	...	...	...	...	...	5	...	2	...	7	...	3	...	...	...	38	23	317	385	...	...	1	...	233	113
Brahman	...	...	...	...	...	1	7	27	5	...	...	65	5	1	...	37	...	3,130	2,817	...	1	170	50	303	204
Chamar	...	...	...	107	1	66	2	8	...	38	...	1	...	...	...	...	...	368	20	...	...	23	...	1,486	17
Dou	...	...	...	...	...	1	...	30	5	34	3	28	5	...	...	47	20	1,443	1,837	...	21	100	3	460	343
Dosadh	...	...	...	...	...	...	...	5	1	9	...	...	...	...	...	...	...	183	253	...	...	3	2	153	83
Ghatwal	...	...	...	...	...	0	...	14	...	125	...	61	...	3	...	101	3	734	713	...	...	271	10	601	61
Gola	...	...	...	...	...	1	...	34	2	63	...	73	...	...	...	...	4	571	767	...	...	31	1	246	94
Hari	...	...	...	...	...	16	...	21	...	76	...	30	1	1	...	30	1	1,146	381	...	...	278	...	628	73
Jolaha	...	...	...	...	...	...	...	3	...	3	...	2	...	...	...	...	...	183	294	...	...	...	...	410	347
Kohar	...	...	...	...	...	42	...	30	...	63	...	230	16	...	...	8	...	766	483	...	...	61	3	457	36
Kayasth	...	...	...	...	...	4	...	8	...	10	...	63	1	1	...	3	...	368	170	...	...	30	3	501	60
Kold	...	...	...	...	...	47	...	43	...	6	...	1	...	...	...	...	...	107	5	...	...	2	...	863	4
Kumhar	...	...	...	...	...	1	...	6	...	38	...	78	...	...	...	280	8	377	57	...	...	43	...	103	24
Karmi	...	...	...	...	...	8	...	1	...	16	...	...	...	...	...	33	...	267	163	...	...	30	1	347	40
Lohar	...	...	...	...	...	9	...	0	...	20	...	75	10	...	...	64	2	630	726	...	...	33	...	383	51
Mallah	...	...	...	...	...	13	...	3	...	13	...	8	...	...	...	31	10	603	300	...	...	...	...	421	23
Musahar	...	...	...	...	...	24	...	...	...	5	...	35	14	...	...	...	...	138	123	...	...	...	...	125	153
Nunlya	...	...	...	...	...	1	...	8	...	...	...	6	...	...	...	10	3	478	603	...	1	123	3	313	93
Padi	...	...	...	...	...	10	...	4	...	4	...	8	...	...	...	30	27	301	371	...	...	3	1	321	37
Pathan	...	...	...	...	...	2	...	2	...	45	...	3	...	...	...	10	1	300	110	...	...	27	...	60	9
Rajput	...	...	...	...	...	18	...	10	...	68	...	32	...	...	...	1	...	137	57	...	...	3	...	307	4
Santal	...	...	...	...	...	62	...	20	...	24	...	37	...	30	...	4	...	704	125	...	...	32	...	1,179	48
Toli	...	...	...	...	...	...	...	15	...	8	...	6	...	...	...	...	...	1,607	3,672	...	...	6	...	483	140
Tori	...	...	...	...	...	...	...	...	...	0	...	28	...	...	...	4	...	304	235	...	...	30	1	325	38
Tori	...	...	...	...	...	3	...	25	...	15	...	28	...	...	...	2	3	405	737	...	...	54	8	504	38
TOTAL	...	389	...	256	1	970	9	860	21	790	5	988	54	27	...	660	99	17,314	17,962	43	23	1,301	90	11,438	2,357

SUBSIDIARY TABLE XII.—AGE, OCCUPATION AND PRINCIPAL BIRTHPLACES OF THE MOST NUMEROUS CASTES IN THE JHERRIA COALFIELD—continued.

BIRTH DISTRICTS.

Caste.	PATNA.		GAYA.		SEHARAD.		SARAN.		MONGHYR.		BHAUPUR.		SANTAL PARGANAS.		HAZARIDIGH.		RAIKHIL.		MAXIMUM (COAL FIELD).		MAXIMUM (OUT-SIDE COALFIELD).		SINGBHRUM.		BANEURA.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Baniya	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74
Baidya	8	8	41	8	8	8	5	...	41	...	...	...	7	43	153	62	...	...	110	132	0,307	3,447	...	...	104	101
Bhadra	881	811	2	2	...	...	24	13	...	...	8	8	94	141	...	...	29	20	823	416	...	...	...	...
Bhadra	1,313	778	5	...	...	...	2,574	2,386	37	15	69	68	1,063	1,578	2	...	85	31	906	780	3	...	10	...
Bhadra	138	17	170	11	18	4	79	14	23	...	33	11	185	24	...	...	20	14	303	300	1	...	100	60
Bhadra	14	207	48	11	0	1	305	187	80	14	00	33	989	511	...	...	19	7	475	201	108	67	3	...
Bhadra	64	56	...	...	...	...	18	68	8	...	54	42	132	95	...	...	8	38	250	335	2	1	9	13
Bhadra	774	802	35	35	3	2	708	547	23	1	26	34	628	227	...	...	21	4	232	73	1	...	2	...
Bhadra	177	81	3	5	...	...	206	95	75	3	133	40	813	430	...	...	33	63	961	702	1	10	3	...
Bhadra	318	23	26	5	21	2	740	189	64	8	43	8	1,045	124	4	...	16	...	237	114	51	60	23	...
Bhadra	83	3	1	1	1	...	15	26	2	3	140	54	104	203	...	1	33	34	401	408	1	...	1	...
Bhadra	97	51	16	8	13	...	1,017	900	183	55	94	45	822	238	...	...	51	62	206	221	...	...	1	...
Bhadra	181	74	34	10	1	1	209	95	2	...	10	6	404	140	3	...	16	27	459	224	3	3	13	...
Bhadra	99	10	57	9	13	1	64	10	12	1	12	...	136	32	...	...	24	13	108	93	...	...	204	65
Bhadra	154	23	13	...	3	...	155	7	2	...	13	...	600	7	2	...	4	3	88	35	...	...	...	33
Bhadra	73	34	38	10	...	...	117	32	...	...	1	...	180	73	...	...	6	7	356	160	...	...	1	1
Bhadra	117	9	10	1	7	...	147	63	2	3	13	4	141	21	12	...	33	130	1,313	1,003	21	14	1	...
Bhadra	853	51	97	5	8	...	182	147	18	8	28	10	206	75	...	...	9	20	509	330	10	16	6	9
Bhadra	403	408	41	2	...	...	11	3	...	...	...	...	4	5	...	...	18	2	65	43	...	...	...	...
Bhadra	320	202	...	...	...	...	641	680	3	...	10	...	277	181	...	...	2	11	174	136	...	...	...	...
Bhadra	40	240	175	11	6	5	423	297	3	...	6	10	34	10	...	...	6	...	24	26	...	...	...	...
Bhadra	49	17	50	42	2	...	35	24	7	...	8	7	77	35	...	...	10	...	86	32	...	...	...	...
Bhadra	83	31	70	17	5	4	84	48	6	...	14	12	171	78	3	...	...	...	89	67	...	...	1	1
Bhadra	287	40	190	10	58	...	173	30	21	...	50	3	732	102	1	...	19	10	217	137	...	...	24	3
Bhadra	13	5	2	...	...	...	57	19	6	...	963	387	972	428	...	...	216	169	4,631	4,723	1	...	20	13
Bhadra	83	10	7	8	3	2	106	21	1	...	8	1	257	28	...	...	25	34	174	317	3	2	87	17
Bhadra	40	15	...	...	2	...	378	180	71	28	83	153	1,188	1,006	...	...	14	11	267	103	...	...	10	11
TOTAL	451	383	6,166	2,795	578	174	160	10	8,677	6,100	602	130	1,604	905	13,189	5,990	26	3	706	843	19,474	14,902	231	186	700	373

SUBSIDIARY TABLE XII.—AGE, OCCUPATION AND PRINCIPAL BIRTHPLACES OF THE MOST NUMEROUS CASTES IN THE JHERIA COALFIELD—concluded.

BIRTH DISTRICTS—concluded.

CASTE.	BUDHWAN.		BIRENDA.		MIDNAPUR.		RAIPUR.		BILASPUR.		EIL BAREIL.		MIDNAPUR.		ANANGARH.		PRATAPGARH.		UNAO.		JAUNPUR.		ALDAHAD.		AMRITSAR.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
25	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	
Bauri	127	160	8	...	...	...	...	10	1	1	...	...	...	...	...	...	1	...	...	...	...	3	...	...	...	...
Beldar	5	1	2	...	...	...	...	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bhujia	17	7	...	...	...	...	...	34	20	2	...	...	...	...	...	...	12	...	...	...	...	5	...	...	1	...
Brahman	371	147	60	13	...	...	...	17	13	11	1	20	1	19	1	64	6	1	...	45	4	25	1	12	...	...
Chamar	5	15	11	...	...	1,263	972	1,840	2,063	17	8	78	24	5	1	13	0	1	...	32	11	43	8	1	...	...
Dom	7	15	1	...	...	...	...	6	10	1	...	...	...	...	...	...	3	...	...	...	...	...	...	...	...	...
Donsah	3	10	...	...	...	...	...	8	5	1	...	2	3	...	...	2	1	...	...	8	2	6	1	1	...	...
Ghatwal	3	3	5	...	...	...	...	18	...	...	...	1	...	...	...	...	...	...	...	1	1	3	...	...	...	...
Goala	6	2	...	...	...	...	...	130	141	7	16	11	3	14	1	76	4	...	...	54	1	31	2	...	...	...
Hadi	36	32	1	11	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	2	...
Jolaha	8	2	4	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	...
Kabar	6	0	...	...	...	...	...	10	43	...	...	6	2	...	...	0	1	...	...	12	1	1	...	21	1	
Kayasth	313	93	...	...	...	...	...	11	2	4	...	1	...	...	...	23	3	...	...	19	3	6	2	...	...	...
Koiri	3	...	...	...	...	...	...	14	3	4	...	3	1	1	...	60	3	...	...	2	...	...	...	...	...	...
Kumar	1	1	...	...	...	...	...	0	6	...	...	...	...	...	...	1	...	...	...	11	...	...	...	...	...	...
Kurmi	3	...	1	...	...	...	...	180	140	3	2	10	1	1	...	26	...	...	...	3	...	11	3	...	...	...
Lohar	0	3	1	...	...	...	...	31	45	1	...	1	...	5	...	1	...	...	...	20	3	1	...	4	...	...
Mallah	...	...	...	...	...	...	...	2	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Musahar	3	...	...	...	...	...	...	...	80	...	...	...	...	...	...	2	...	...	...	...	1	...	...	...	...	...
Munhya	...	1	...	...	...	...	...	3	...	1	2	3	...	...	11	24	6	...	...	...	26	6	...	...	...	...
Paal	7	4	...	...	...	...	...	4	5	61	10	4	2	2	...	76	10	...	...	36	14	171	46	1	...	...
Pathan	6	9	1	...	...	...	...	...	10	8	2	...	...	...	...	1	...	...	...	6	...	23	6	1	...	...
Rajput	88	1	11	...	...	...	...	81	41	35	10	10	...	4	...	32	1	...	...	32	4	6	3	43	10	...
Santal	20	10	2	...	...	...	...	10	14	...	...	...	...	3	...	3	...	...	...	...	...	...	...	...	...	...
Teli	13	8	...	...	...	...	...	110	60	4	1	...	...	...	...	6	...	...	...	...	...	...	...	...	...	...
Turi	3	2	1	...	...	...	...	2	23	1	...	6	1	1	...	...	...	...	...	1	...	...	...	...	...	...
TOTAL	589	4	180	60	6	1,369	1,020	2,555	2,631	106	60	166	50	66	25	423	37	53	3	321	57	300	60	86	11	...

SUBSIDIARY TABLE XV.—ORGANIZATION OF ESTABLISHMENTS.

TYPE OF ORGANIZATION.	INDUSTRIAL ESTABLISHMENTS.																REMARKS.
	Total establishments.	Indigo plantations.	Coal mines.	Iron mines.	Mica mines.	Stone quarries.	Timber yards.	Iron and steel works.	Machinery and engineering workshops.	Brick factories.	Saltpetre refineries.	Oil mills.	Lac factories.	Sugar factories.	Printing presses.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
1. Under the Local Government or Local Authority.	11	...	...	...	...	1	...	...	6	...	...	...	...	...	4	
2. Registered companies ...	236	3	141	4	30	7	3	1	31	2	...	3	1	7	3	(a) One concern has two American directors and another has one American director.	
(a) With European or Anglo-Indian directors.	157	3	92(a)	2	17(b)	2(b)	2	...	30(2)	2	...	1	...	6	...	(b) One concern has one American director.	
(b) With Indian directors	56	...	29	2	12	5	...	1	1	...	...	2	...	1	3	
(c) With directors of different races ...	23	...	20	...	1	...	1	...	...	...	...	...	1	...	...	(c) Two concerns have American directors.
3. Privately owned ...	661	69	239	...	62	33	25	4	2	11	33	17	110	34	29	(2) Americans are part owners of two mission presses.	
(a) By Europeans or Anglo-Indians ...	79	53(c)	7	...	2	3	...	...	...	1	...	...	8	2	5(2)	
(b) By Indians	571	9	330	...	60	31	25	4	2	9	31	16	102	25	24		
(c) By joint owners of different races	11	1	2	...	...	...	...	...	...	1	2	1	...	4	...	

SUBSIDIARY TABLE XVI.—PLACE OF ORIGIN OF SKILLED EMPLOYEES.

BIRTHPLACE.	INDUSTRIAL ESTABLISHMENTS.												
	Total number of workmen.	Coal mines.	Iron mines.	Mica mines.	Copper mines.	Stone quarries.	Iron and steel works.	Machinery and engineering workshops.	Brick, tile and firebrick factories.	Lac factories.	Lime works.	Railway works.	
1	2	3	4	5	6	7	8	9	10	11	12	13	
1. Bihar and Orissa ...	52,698	34,495	562	4,188	239	474	4,108	2,822	981	1,298	83	3,451	
District of employment ...	31,808	19,132	170	3,337	147	430	1,164	1,951	450	1,218	61	3,126	
Other districts ...	20,890	15,363	392	841	92	44	2,024	871	531	80	22	225	
2. Outside the Province ...	11,453	4,449	87	23	336	35	4,968	668	178	216	2	490	
Bengal ...	2,537	1,038	37	17	46	5	850	231	35	79	1	88	
United Provinces ...	2,938	981	22	2	25	7	1,312	217	119	137	1	115	
Central Provinces ...	2,798	1,969	15	1	13	4	730	31	11	...	...	2
Madras ...	855	25	...	...	120	...	631	97	...	...	1	11
Punjab ...	742	140	5	1	68	11	427	35	12	...	...	48
Bombay ...	950	169	6	1	12	3	684	32	1	...	...	22
Others ...	605	77	2	1	57	5	244	25	...	...	...	194
3. Outside India ...	239	15	2	...	17	1	153	14	...	...	...	37
Afghanistan ...	2	...	...	...	...	...	2	...	...	...	...	...
China ...	2	...	...	...	...	...	3	...	...	...	...	...
Nepal ...	66	15	2	...	17	1	30	...	...	...	...	...
England ...	125	...	...	...	...	...	64	12	...	...	...	29
Scotland ...	34	...	...	...	...	...	25	1	...	...	...	7
Ireland ...	1	...	...	...	...	...	...	1	...	...	...	...
New Zealand ...	1	...	...	...	...	...	...	...	...	...	...	1
United States of America	9	...	...	...	...	...	9	...	...	...	...	...

SUBSIDIARY TABLE XVII.—PLACE OF ORIGIN OF UNSKILLED LABOUR.

		INDUSTRIAL ESTABLISHMENTS.											
BIRTH PLACE.		Total number of workmen.	Coal mines.	Iron mines.	Mica mines.	Copper mines.	Stone quarries.	Iron and steel works.	Machinery and engineering workshops.	Brick, tile and firebrick factories.	Lac factories.	Lime works.	Railway works.
1		2	3	4	5	6	7	8	9	10	11	12	13
1. Bihar and Orissa ...		99,543	53,869	4,149	7,973	2,426	4,863	9,274	3,635	3,020	2,554	1,398	6,987
District of employment ...		68,373	38,191	2,874	7,034	2,343	4,372	6,570	2,567	2,066	2,405	940	6,591
Other districts ...		33,270	25,078	1,275	939	83	491	2,404	1,068	954	149	458	396
2. Outside the Province ...		14,462	7,428	97	23	98	390	5,319	594	199	135	170	82
Bengal ...		1,483	1,029	3	7	23	8	178	104	41	61	5	24
United Provinces ...		1,334	1,065	6	8	31	22	240	176	64	67	121	53
Central Provinces ...		9,181	4,330	29	...	5	197	4,064	178	104	3	40	1
Madras ...		563	17	54	...	25	...	414	42	...	...	...	...
Punjab ...		392	389	...	3	7	...	263	13	...	...	...	1
Bombay ...		404	185	...	...	...	...	263	66	...	...	...	...
Others ...		516	259	5	5	7	83	131	8	...	4	1	3
3. Outside India ...		109	20	6	36	9	1	1	22	...	...	...	14
Nepal ...		109	20	6	36	9	1	1	22	...	...	...	14

SUBSIDIARY TABLE XVIII.—DISTRIBUTION OF CERTAIN RACES IN CERTAIN INDUSTRIAL ESTABLISHMENTS.

RACE OR CASTE.	INDUSTRIAL ESTABLISHMENTS.											
	TOTAL.		COAL MINES.		IRON MINES.		MICA MINES.		COPPER MINES.		STONE QUARRIES.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1	2	3	4	5	6	7	8	9	10	11	12	13
Total Europeans and Anglo-Indians.	1,133	11	369	1	11	2	33	...	29	...	5	...
Number employed as—												
(1) Managers ...	189	...	128(a)	...	3(b)	...	13	...	2	...	2	...
(2) Supervising staff ...	488	...	227	1	7	1	20	...	24	...	3	...
(3) Clerical staff ...	28	6	13	...	1	...	...	...	1	...	...	...
(4) Skilled workmen ...	428	3	3	...	...	...	...	...	2	...	...	...

RACE OR CASTE.	INDUSTRIAL ESTABLISHMENTS.—concl'd.											
	IRON AND STEEL WORKS.		MACHINERY AND ENGINEERING WORKSHOPS.		BRICK, TILE AND FIREBRICK FACTORIES.		LAC FACTORIES.		LIME WORKS.		RAILWAY WORKS.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
	14	15	16	17	18	19	20	21	22	23	24	25
Total Europeans and Anglo-Indians.	308	4	127	...	15	...	12	...	7	...	217	5
Number employed as—												
(1) Managers ...	1(c)	...	25	...	4	...	7(d)	...	5	...	1	...
(2) Supervising staff ...	124	...	52	...	10	...	3(e)	...	2	...	18	...
(3) Clerical staff ...	1	1	6	...	1	...	...	...	...	...	5	5
(4) Skilled workmen ...	182	3	44	...	...	...	2	...	...	...	195	...

SUBSIDIARY TABLE XIX.—PROPORTIONAL DISTRIBUTION OF ADULT WOMEN AND CHILDREN OF EACH SEX IN DIFFERENT INDUSTRIES.

PRINCIPAL INDUSTRIES OF EMPLOYMENT.											
WOMEN AND CHILDREN.	Total number employed.	Coal mines.	Iron mines.	Mica mines.	Stone quarries.	Iron and steel works.	Machinery and engineering workshops.	Brick factories.	Lac factories.	Coke ovens.	Cigarette factories.
1	2	3	4	5	6	7	8	9	10	11	12
Adult women ...	1,000	643	36	62	44	129	13	27	30	8	8
Children ...	1,000	620	44	136	60	37	17	3	15	11	12
Males ...	868	318	30	29	30	48	13	4	19	6	10
Females ...	444	304	24	27	30	11	4	4	3	5	2

SUBSIDIARY TABLE XX.—DISTRIBUTION OF POWER.

TYPE OF POWER USED.	INDUSTRIAL ESTABLISHMENTS.												
	Total establishments.	Coal mines.	Iron mines.	Mica mines.	Copper mines.	Stone quarries.	Iron and steel works.	Machinery and engineering workshops.	Brick, tile and firebrick factories.	Lac factories.	Lime works.	Railway works.	REMARKS.
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
(1) Steam	297	247	2	11	1	2	1	21	5	2	4	1	(i) One coal mine, one iron mine and one machinery and engineering workshop use both steam and oil engines and are included under each head.
(2) Oil	13	1	2	1		2	1	4		2			(ii) The following establishments which use steam power as well as electric power generated on the premises are included under each head :—
(3) (a) Electricity generated in the premises.	24	21			1		1	1					17 coal mines.
(b) Electricity supplied from outside.	13	13						4	1				1 copper mine.
													1 iron and steel works.
													1 machinery and engineering workshop.
													(iii) The following establishments which use steam power as well as electric power supplied from outside are shown under each head :—
													10 coal mines.
													1 machinery and engineering workshop.

(a) Includes 3 French Canadians and 1 American. (b) Includes 1 Canadian. (c) Is an American. (d) Are Americans. (e) Includes 1 American.

GOVERNMENT OF BIHAR AND ORISSA.

REVENUE DEPARTMENT.

5965
RESOLUTION No. ————R.
VC—16

Dated Patna, the 29th June, 1923.

READ—

THE Report of the Census of Bihar and Orissa, 1921, by MR. P. C. TALLENTS, I.C.S.

This is the first census report of the province that has been written since the territorial redistribution of 1912, though after the census of 1911 the figures of Bihar and Orissa were separately tabulated. The operations were conducted under the supervision of Mr. P. C. Tallents, I.C.S., by whom the report has been written. The Governor in Council has read the report with interest, and now desires to place on record the following observations on the manner in which this important task was done and the conclusions which have been drawn from the statistics compiled.

2. The responsibility of the Superintendent of Census Operations was one of no little anxiety. While his District Charge Superintendents were officers in regular Government employ, the actual work of enumeration and a great part of the subordinate supervision were, as usual, in the hands of non-officials, who served not merely without remuneration but often at considerable expense to themselves and in the face of obloquy. For the non-cooperation movement was at its height; and while opposition to the census formed no part of its programme, it indirectly affected the work by making the public apathetic, if not hostile, and by distracting district and police officers whose active cooperation is essential. The efficiency of the organization in the face of these difficulties reflects credit on all concerned. The Superintendent has drawn particular attention to the high standard of work maintained in the Feudatory States of Orissa.

3. The total cost of the census, as far as could be ascertained at the time of writing the report, was Rs. 3,72,928, or Rs. 7-6-10 per thousand of the population, as compared with Rs. 5-5-7 in 1911. The increased cost of all commodities and the rise in wages is sufficient to account for the difference.

4. The report is of particular interest, not only as being the first self-contained statistical analysis of the population of the province, but also because the period covered by the review is one of great political, social and economic change. It has been customary for Indian census reports to be catholic in the choice of subjects with which they deal, but from the demographic point of view political and social changes are of comparatively small account, and to the census officer the outstanding features of last decade were the influenza epidemic of 1918 and the scarcity of 1919. The present report differs from its predecessors in paying less attention to ethnographical and racial matters, and more to economic and industrial considerations.

5. There has been no change of importance in the area or the administrative divisions of the province since it was first constituted in 1912. The province, including the Feudatory States, supports a population of about thirty-eight million persons, or approximately the same as that of England

and Wales, on an area nearly twice as large. The greater part of the inhabitants of England and Wales, however, live in towns, and a more just appreciation of the density on the soil can be obtained from the fact that the provincial population is nearly as large as that of France on an area of about half the size. The map which forms the frontispiece to the report shows that the pressure on the soil is very unequally distributed, being greatest in the river valleys and least on the Chota Nagpur plateau, while in places there is no doubt that it has reached the maximum which the soil can support. The history of the population during the last fifty years has been an increase in descending ratio up till the last decade, when it has been converted into a small net decrease. There is a decrease in North and South Bihar and a larger decrease in Orissa, while the compensating increase is furnished entirely by the Chota Nagpur plateau, including the States. Variations within these natural divisions are not regularly distributed, and the causes operating in each area are exhaustively discussed in the first chapter of the report. Local and temporary causes may account for small fluctuations, but the general impression left by reading the report is that the province being predominantly agricultural, the population on the whole is limited to the number which can live on the produce of the soil, that this limit (failing improvements in the methods of agriculture—for which, however, there is much room) has been reached in many places and expansion on a large scale is only probable when land still remains to be reclaimed or industry develops.

6. *Urban and rural population.*—The province of Bihar and Orissa is more rural in character than any other province in India. The proportion of urban and rural population has been practically stationary since 1891 and would in fact have shown a decrease had it not been for the new town of Jamshedpur. Mr. Tallents has given an interesting account of the rapid rise of this industrial area, an account which is further expanded in the chapter on industries. The number of places classified as towns is largest in the Chota Nagpur plateau, where their average size is smallest, and smallest in Orissa, where their average size is largest. But the most distinctively urban tract is south Bihar which contains Patna and Gaya, and “a number of other towns which stand as witnesses to the river trade and vanished administrations of a former day.” Patna, the only city in the province of over one hundred thousand inhabitants, is itself in a state of decay, partially arrested by the presence of the provincial capital. Cities in northern India have depended for the most part on the ruler’s court or a river, and generally on both. Patna is again the administrative centre, but though it is marked out by nature as a riparian mart and had been for centuries the chief distributing centre for the merchandise of north India, the increase of railway communications and the cheapening of railway freight have greatly reduced the importance of the river as a highway of traffic. There is, therefore, little reason for surprise that the figures indicate a steady decline in population during the last forty years, which even the addition of nine thousand persons in the new capital has failed to neutralise. A most valuable contribution to the report is Professor Hamilton’s economic census of the Patna bazar, an attempt to answer the question how, in the absence of any trade or manufactures of importance, the reduced population lives. Of the remaining towns little need be said. The enumeration of the inhabitants of towns is particularly liable to be affected by local and temporary causes, but, on the whole, it is clear that there is no tendency among the population to move towards the towns, but rather the reverse. The majority of the towns have less than twenty thousand inhabitants, and have been called into existence by administrative needs, or by the railways, or as small distributing centres of agricultural produce, and towns which are the natural centres of indigenous industries can hardly be said to exist.

7. *Migration.*—Migration is a subject which is treated at several places in the report, as the inferences to be drawn from figures are frequently affected by it, but the salient features have been collected and examined in the third chapter of the report. Casual and temporary migration are factors which give trouble to the enumerator, but for the statistician the chief interest lies in what is described as periodic, semi-permanent and permanent

migration. Permanent migration outside India appears to be almost negligible, though little information is forthcoming: the only figures available are those of involuntary emigrants to the Andamans. Immigration from outside India is also negligible, consisting mostly of a small influx from Nepal, and those engaged in the service of Government or employed at industrial centres. Permanent migration due to the overcrowding of one part or the superior attraction of another is also not of great importance. Purnea and the Orissa States attract immigrants from other parts where pressure is more heavy on the soil, and in this connection may be noticed the interesting discussion in Chapter I of the tendency of the population of certain parts of north Bihar to shift northward. The most important feature is semi-permanent migration within India but outside the province. In this connection the province loses on the average, for a time at least, four persons for every one it gains. This is, for the most part, from the Chota Nagpur plateau to Bengal and Assam. It fluctuates with the condition of agricultural prosperity, and was very great during the scarcity of 1918-19, both from Chota Nagpur and from Orissa. The development of communications and the increased fluidity of labour have entirely changed the nature of the problem of famine relief. Periodic migration correlated to the agricultural seasons is also of considerable volume, and perhaps of greater importance to this province than the semi-permanent migration in that it provides many thousands of persons with a regular source of income. The people of the province, however, are, on the whole, essentially home-loving, and only leaving their homes under pressure of necessity, return to them as soon as possible.

8. *Religion*.—Nothing of striking interest is revealed by a comparison of the figures of this census with those of 1911. The same difficulty has been found in determining what constitutes Hinduism, and the personal prejudices of enumerators and enumerated count for a great deal in these statistics. Hindus form 83·2 per cent., Muhammadans 9·8 per cent., Animists 6·2 per cent. and Christians ·8 per cent. of the people of the province. The rate of natural increase of Muhammadans in the last decade seems slightly in excess of that of Hindus, and the Muhammadan takes more kindly to town life. Owing to the uncertainty of the border line, there is always liable to be some access to the Hindus from the ranks of the Animists. Not the least interesting portion of the report is Mr. Tallents' description of the religious movements which have taken place during the past decade amongst the aboriginal tribes, although there is a material decline in the absolute numbers and relative proportion of Animists since last census. Mr. Tallents concludes that there is no marked general movement towards Hinduism amongst the aboriginal tribes but rather an impression of increased conservatism on their part. The Hindu classification has been assumed wholesale by the Santals of Manbhum and Singhbhum, and more freely than before by the Mundas of Ranchi. On the other hand there is a marked increase in the Animist population of the Santal Parganas. Some doubts have been cast on the accuracy of the statistics of Indian Christians, which Mr. Tallents discusses in his report. The increase in this community is due almost entirely to conversion and not to mere natural increase. Christianity has maintained its hold in Chota Nagpur. Elsewhere the only remarkable figure is that from Shahabad.

9. *Age, sex and civil condition*.—Individual age returns are very unreliable, but the errors, whether deliberate or accidental, are fairly constant, and useful inferences can be drawn from the figures in the mass. There have, however, been more disturbing factors in the devastating influenza epidemic of 1918 and scarcity that followed it. Varying degrees of susceptibility to want and disease at different ages, and between the sexes, have disturbed the proportion of the age and sex groups, which are further affected by the emigration consequent upon economic distress. The mean age of the provincial population has risen slightly in the last decade, and more in the case of males than of females, which appears to be due to a decrease in male infants. The crude birth-rate and the infantile death-rate is higher than in European countries, while the survival rate is lower; the figures of infantile mortality show no tendency to improve, and the loss is greater among

male than among female infants. Since the census was first taken the province has always had an excess of females over males, but the difference is decreasing, and the decrease is an outstanding feature of the last decade, inspite of the fact that more boys are always born than girls. After the first few months of life, however, the male child seems to have the better chance of survival, and the balance is nearly restored by the great depletion of female life about the age of puberty owing to the prevalence of premature marriage. The figures indeed indicate a tendency to postpone the ceremony of marriage to the age of puberty, but there is nothing to show that this has affected the age of effective marriage. About half the population of the province is married, and of the remaining half, one-quarter is widowed.

10. *Literacy*.—The connotation of the term had varied from census to census until 1911, when the criterion of ability to read and answer an ordinary letter was adopted. The figures of this census can for the first time be profitably compared with those of its predecessor. About five per cent. of the population over five years of age are literate, the majority of whom are males. While Patna district holds the pride of place for both male and female literacy, Orissa is the division in which education is most widely diffused. This is a distinction of old standing, which is to be explained by its long-established celebrity as a pilgrimage centre, by its numerous religious endowments, and by the importance of its priestly and writer castes. As compared with 1911 there has been a general advance in literacy, common to both sexes and all the main religions. In marked contrast to the state of affairs disclosed at last census in the neighbouring province of Bengal, Muhammadan males equal Hindu males in literacy, while the Muhammadan female is in advance of her Hindu sister. Education in English has spread at an appreciably increased rate in the last ten years. This is reflected in the figures of educational institutions, which show that the increase of middle English schools is greater, both absolutely and proportionately, than of middle vernacular schools. The number of those receiving a collegiate education has almost doubled in the period under review, while there has been a marked increase in those receiving a secondary education, especially among females. The number and circulation of periodicals, a fair index to the progress of education, has increased three-fold in the last decade.

11. *Languages*.—As Mr. Tallents says, the province has long been the happy hunting ground of the comparative philologist, and its languages have already been exhaustively studied. The chapter in the present report, presenting an illuminating summary of the changes which have occurred during the past decade, though the figures, as in the case of Urdu, are often vitiated by reporting difficulties or communal prejudices. As regards Bihar the general impression left is that in the Ganges valley the opening up of communication and the spread of education are tending to obliterate linguistic boundaries. Oriya has made a notable advance in Sambalpur: Bengali has gained at the expense of Hindi and Santali in Manbhum. In the Chota Nagpur plateau, the Dravidian and Austric languages there spoken possess an extraordinary vitality. There is a noticeable decline of Santali in Manbhum which is balanced by the Jains in Purnea.

12. *Caste, Race and Nationality*.—Ethnographical discussions have always formed a large part of the census report, but on this occasion it was decided that enquiries on the point should not be conducted on the same scale as in former years, and, as compared with the census report of 1911, the space occupied by the corresponding chapter in this volume is small. It is not that the subject has lost anything of its human interest, but (as Mr. Tallents observes) it has now become a specialized branch of science for highly qualified experts, and is one only of the factors with which a census officer must deal. It had indeed been suggested by an Indian that caste was a dying institution, and that the census ought not to assist in its perpetuation by recording it. It is clear, however, that there has been no relaxation of caste distinctions as far as intermarriage is concerned; the division into endogamous groups is still the controlling fact in Hindu society. There has

been a certain necessary adjustment to modern conditions, one symptom of which is the relaxation of the prohibition of intermarriage between members of different sub-castes, and another is the increasing number of members of the functional castes who are abandoning their traditional occupations. An informing illustration of this is to be found in the careful analysis by caste of the labour force at Jamshedpur, where modern industrial conditions are incompatible with the ancient routine of everyday life, and men of all castes and races work side by side without misgiving as to the caste of their neighbours. Again, among the highly educated there is some tendency towards the emancipation of women, but loss at the top is more than compensated by the gain to the caste system at the bottom, where lower castes in their ambition for social advancement are showing a tendency to surrender their liberty to the more rigid tenets of the Hindu code. These necessary adjustments to modern conditions, however, in no way indicate that the system is breaking down or losing its hold; modern attempts at internal reform, which make the strongest appeal, run on caste lines; and social aspirations are of whole groups for promotion within the social framework rather than of individuals for emancipation from its rules. The variations in the actual number of the castes recorded are unimportant, and mostly explained by local and temporary causes or by the desire of a low caste man for an appellation commanding more respect than the one to which he is strictly entitled. The influence of the war on social customs seems likely to be transitory.

13. *Occupations*.—The most significant part of the report is the portion of the occupation chapter which relates to industries, and the expansion of this part of the report is indicative of the great and rapid development of industrialism in the last decade. At the time of the previous census the industries of Bihar and Orissa were dismissed in a few paragraphs as being “even less advanced than those of Bengal”, and as consisting mainly of the extraction (as opposed to the conversion) of minerals, and the manufacture of indigo; while the railways employed more than half of the remaining persons returned as operatives. The industrial centre of gravity within the province has changed in the last ten years. While the province is still predominantly agricultural, and the extraction of minerals has retained the premier place held by it in 1911, one of the chief centres of industrial life is now at Jamshedpur, where the works of the Tata Iron and Steel Company and its subsidiary enterprises are located. Some months after the census of 1911 this company produced its first ton of pig iron, and the annual output now is hundreds of thousands of tons of iron and steel, as well as rails, beams, rods and the like, while the works are still expanding. Meanwhile, indigo manufacture, the only other occupation thought worthy of special notice in 1911, is falling into decay after the temporary impetus given to it by the war, and is treated as a subsidiary occupation by many of those who still pursue it. Its place is being taken in a large measure by sugar factories, and its decay is responsible for most of the decrease in the occupational category of growing special products. While the most significant feature of the decade is the inception and development of highly organized industry, the greater attention given to the subject at this census has revealed the importance and vitality of some of the partially organized or quite unorganized occupations, their economic basis and great potentialities if conservative and sentimental objections to the introduction of modern mechanical devices can be overcome, and capital and facilities for marketing obtained by cooperation. Not the least interesting paragraphs of the report are those dealing with indigenous textile manufacture. The previous census had recorded a decrease in the number of those who lived by the products of their looms; the present census has recorded an increase which more than compensates for the loss, while some informing statistics have been collected showing, among other things, that while the total amount of cotton cloth consumed by the province is less than it used to be, a larger portion of the cloth worn is produced at home than was the case ten years ago. Among partially organized occupations may be included the production of mica, of which a large part of the world's supply is mined in this province by the most crude and wasteful methods; also the propagation of lac. Of this

commodity, too, a large part of the world's supply comes from Bihar and Orissa, but the production, manufacture and marketing of it are still to a great extent unsystematised. Much valuable information has been collected bearing on the social and economic conditions of labour, a new problem which the province has been called upon to face in the last few years. The tables showing the classification by origin of the owners, directors and persons employed in industrial undertakings is of special interest as indicating the extent to which the province is directly reaping the benefit of industrial expansion. The statistics show that, while in the more ambitious undertakings a large part of the capital has come from abroad, or at least from outside the province, and direction and control is largely in the hands of Europeans, yet the bulk of the privately-owned concerns belong to Indians, while the greater part of the skilled labour and nearly the whole of the unskilled labour employed comes from Bihar and Orissa.

14. In conclusion the Governor in Council desires to put on record his appreciation of the devoted labours of the census staff, the district officers and the host of official and non-official workers who have contributed to the successful issue of the operations under circumstances of unusual difficulty, upon which it is unnecessary to dilate. His Excellency in Council further wishes to express his special appreciation of the services of Mr. Tallents, to whom the local Government is indebted not only for his energetic and able conduct of the operations, but also for a report characterised by clear insight and freshness of treatment. The names of the officers commended by him and those reported separately for good work will be noted in the Appointment Department.

By Order of the Governor in Council,

J. R. DAIN,

Secretary to Government.

MEMO. No. 5983.

Dated Patna, the 29th June, 1923.

COPY, together with a copy of the report, forwarded to the Appointment Department for information, with the request that necessary action may be taken with reference to paragraph 14 of the resolution.

B. M. CHATTARJI.

Offg. Under-Secretary to Government.

